

# Manufacturers Record

Exponent of America

NOVEMBER 25, 1920

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## THANKSGIVING.

AN old legend tells that every morning the Angel of Petitions and the Angel of Thanksgiving spread their wings and speed to the earth to carry back to the Throne of Heaven the petitions and thanksgiving of mankind. The legend says that the Angel of Petitions nightly returns loaded with prayers for blessings and for help, but that the Angel of Thanksgiving returns often almost empty handed.

The legend teaches the great truth that we are constantly seeking new blessings and forgetting to count the blessings we have.

On this Thanksgiving Day it well becomes all Americans to render praise to God for His infinite benefaction and one by one to enumerate the blessings with which our country and we individually have been crowned.

Today we may well unite in a swelling song of praise such as will require many Angels of Thanksgiving to carry back to the Heavenly Land.

## "THE MAN WHO WOULD BE KING."

EVERY nation has its wise men and its fools, its statesmen and its adventurers. It must be taken for granted that such men as the Vanderlip who has been in Moscow apportioning the world between Lenine and himself will appear on the horizon now and then. It would appear that the joke is on Lenine, who probably thought he was dealing with "the" Mr. Vanderlip. The taking over of a big slice of Siberian territory involves diplomatic considerations of such supreme importance that a solemn referendum would probably be requisite before this nation would undertake the task. It is too big a bite for the Vanderlip who thinks that Lenine is the greatest man in the world. We suspect him. His baggage ought to be searched for Bolshevik propaganda.

## SENATOR OWEN EXPOSES THE RESERVE SITUATION AND THE RUINOUS POLICY PURSUED BY THE UNITED STATES.

WE publish elsewhere in this issue the very remarkable and exact letter from Senator Owen to Mr. M. L. Requa of the Sinclair Consolidated Oil Co., in which the Senator demolishes the contention of the financial camaleons who have been attempting to beguile the business world into acceptance of their contention that drastic deflation has been essential in view of the gold situation.

The United States is the only nation in the world actually on a gold basis. There is, therefore, as the Senator emphasizes, not a good basis of comparison on which to estimate American and British "reserves." Nevertheless, says the Senator, "the English banking system is admirable, is sound, is making a very economical use of gold, and the Bank of England, in its banking department, with less than \$80,000,000 of gold, is transacting the business of the world through London without fear, while American financiers are absurdly trembling in their boots with over twenty-seven times as much gold visible in the Federal Reserve Banks."

Twenty-seven times as much gold and scared to death! Stop the wheels in the mills, cut production in half, drive the farmers into bankruptcy and bring about general chaos is the policy of the Federal Reserve Board because it is afraid of its own shadow. Incompetency, financial incompetency, threatens to cost the nation almost as much as did the financing of the whole war. In inventory terms, the paper losses, compared with prices of a year ago, would amount to a minimum of \$10,000,000,000. It is colossal; it is more than any nation can stand. It is the price the nation is paying for a stupid sort of financial orthodoxy, for the allegiance of professional financiers to the letter of the textbooks.

Here are the great joint stock banks of London, known and respected all over the world, with outstanding obligations of 1,955,200,000 pounds—almost \$10,000,000,000 at normal exchange rates—and they hold, Senator Owen shows, "less than 4 per cent actual gold reserves" behind these obligations. In England they make their gold work; in America it is a white elephant to be worshipped.

Senator Owen declares that the Federal Reserve Board and the banks are now "taxing the country in an unforgivable way." So we have been saying right along. Months and months ago it was easy to foresee what would happen. Starting avalanches is not a safe sport. But the wise men in Washington, with snug complacency, assumed that they could stop the slide before it went too far.

But it is constructive criticism that is needed, now that there has been full exposure of the responsibility of the Federal Reserve Board. There, too, Senator Owen recommends what we have steadfastly been preaching: "Expand the credits of the Federal Reserve Banks, as permitted by the Federal Reserve Act, to the extent that actual production may require, and in this way check the tendency to depression and stop the alarm which is causing men to slow up in producing the things the world requires. Many men are stopping production be-



cause of the fears excited by this policy of deflation. Deflation is justified when credits are used unduly for speculative purposes or for hoarding, but denying credit for legitimate production and distribution is harmful to the country and cannot be justified."

The shutting down of plants, which deprives workmen of the means to live; the ruin of farmers by denying them even the cost of production for their crops, prepares a soil suited to the growth of Bolshevism. Men are not conservative when they are face to face with the necessity of getting something to eat. There is no form of government which can appeal to them if under it they have not well-being. It is the one time of all times when the Government should be solicitous of the welfare of its people and most careful not to espouse disciplinary policies calculated to bring about general depression and unrest.

A return to normalcy means a return to common sense, and common sense counsels efficient and liberal financing of production.

It should be a thing of shame and humiliation to the Government that the one great unproductive institution in the nation, the banks, should be revelling in a year of unprecedented profits when most of the great productive industries stand on the precipice of tremendous losses. It discloses organic trouble in governmental functioning and it must be corrected.

### THE LEAGUE OF NATIONS IN ACTION.

THE wisdom of the people in declining to accept the Covenant of the League of Nations is being abundantly demonstrated daily by the cable dispatches from Geneva.

An international military police force has been summoned from Great Britain and Spain to keep order at Vilna, and the sessions of the Assembly have been characterized by frequent suggestions that national armament be abandoned and a League army be depended on to keep the peace of the world.

The demand for pooling of the world's raw materials and the abolition of tariffs has been insistent. A Canadian delegate offered the most serious objection to the plan.

The South American nations were found demanding the abolition of the Monroe Doctrine on the ground that the League Covenant made it unnecessary. The Argentine influences, which have always been opposed to the Monroe Doctrine, have no delusions about the conflict between the Doctrine and the League. If the latter survives, the former cannot.

The League Council claims that it alone has jurisdiction over mandates, and the Great Powers are exploiting the mandated territories as if they were individual possessions.

The Assembly is clamoring for the right to elect the members of the Supreme Council, which would put the control of the League in the hands of the small nations of the earth and present the ridiculous spectacle of the British Empire, France and the United States being subject possibly to the edicts of nine men from nine backward States.

All important proceedings are in secret. The Assembly is already a hotbed of intrigue. Moreover, it will be weeks before the people of America will have anything like comprehensive reports of what has occurred. Cable dispatches are necessarily brief and lacking in detail.

The road to international peace is through education and the practice of international justice. Peace cannot be brought about by political formulas and the creation of cumbersome machinery. Christianity long ago gave the world a universal peace code. It is easier to follow than the man-made map for peace, but the statesmen refuse to accept it. They insist that their way is the better way, but their leadership invariably leads the people into the wilderness.

The nation has abundant cause for thanksgiving that it is not officially represented at Geneva.

### TAXES.

THE demand of business for an immediate general revision of the revenue act is not very pronounced. If collections for 1920 are made on the basis of the present law, there will be a great void in the Treasury. The excess profits tax, which has been the Treasury's chief reservoir, is virtually dry. "There ain't no such animal." Indeed, when inventories are taken it will be found that many huge payers of the tax in former years will be paying nothing at all. A relief from drastic taxation, in other words, has been brought about by the price current, and many industries have decided that their tax burden will be less under the existing law, bad as it is, than under a new law. The present Act was a great revenue-producer when prosperity was in full tide, but will be a mighty poor revenue-producer under existing conditions.

But it will be utterly impossible for Congress to enact a new bill between now and March, when tax returns must be filed. It is altogether probable, therefore, that the new Revenue Act will be retroactive only to January 1, 1921, and that taxes for 1920, to be collected in 1921, will be under the present law. This is almost certain to mean heavy Treasury deficits. There is a way out, however, and we think it will be adopted. If, for instance, a general sales tax is made a feature of the new law, collectible month by month, it will put currently into the Treasury money that under the existing law does not go into the national coffers until months after its collection by private firms. A general sales tax would take up the slack.

This is an important and may be the decisive influence in favor of the adoption of the general sales tax.

### "WAR MILLIONAIRES."

REPEATEDLY we have shown that the demagogic charge going the rounds of the press to the effect that the Government had reported that the war created anywhere from 20,000 to 40,000 millionaires, according to the periodical publishing the report, had no basis in fact. The Government never made any statement on the subject. The figures were arrived at by some theorist who decided that anybody who pays a tax on an income of \$40,000 or more must necessarily be a millionaire.

The figures for 1918 on income-tax returns are now available, and the following table shows the number of incomes of \$40,000 or over:

Income Class.	1917.	1918.
\$40,000 to \$50,000.....	7,087	6,440
50,000 to 100,000.....	12,439	9,304
100,000 to 150,000.....	3,302	2,350
150,000 to 200,000.....	1,302	800
202,650 to 250,000.....	708	461
250,000 to 300,000.....	342	210
300,000 to 400,000.....	380	200
400,000 to 500,000.....	179	122
500,000 to 1,000,000.....	815	178
1,000,000 and over.....	141	6
Total.....	26,190	20,944

In 1917 there were 141 persons with incomes of over \$1,000,000, their net income amounted to \$306,835,914. In 1918 there were 67 persons with an income of over \$1,000,000, and their combined net income amounted to \$137,486,892.

There are few great estates in these days yielding as little as 4 per cent on investments, and it would be a rather violent assumption to conclude that an income of even \$50,000 a year means a capital of \$1,000,000. Some men have salaries of \$25,000 a year and little else. Certainly, none would care to say that because a man had an income of \$3000 he was worth \$75,000. Many could wish that they in fact did have a capital equal to 25 times their income.

Eliminating from the above numbers all those with incomes between \$40,000 and \$50,000, there would be left, on the showing made, less than 15,000 millionaires, and it is quite probable that 10,000 is a very liberal estimate.



## Sure Omens of Prosperity

**D**EPRESSION in America is a monstrosity, as unnatural as the Siamese twins or any other freak.

Never has the nation possessed the assets of prosperity in such abundant volume as now. The pessimists are in for a sound licking. It never did pay to be a "bear" on America. It will not pay now.

Our crops are bounteous, and they are the final measure of new wealth. In terms of cotton, wheat and corn we are far and away richer than we were a year ago.

The transportation system, after years of starving, is beginning to take vigor from nourishing policies.

We have our own merchant marine, able to handle our commerce, and we are free from profiteering cargo charges levied by foreigners.

We have more than a third of all the gold in the world, in volume enough to furnish credits for transacting the business of the world, if economically and not prodigally employed.

We have less social unrest than any other people and are superior in the mechanical facilities which make for quick and excellent production.

The people have voted overwhelmingly for a typically American Administration. They have given their mandate for the protection of American industries against unfair competition. Sane administration of the Government and abstinence from wild experimentation is assured for at least four years, probably for eight.

The world's wants are tremendous and many of them we alone are able to fill.

Millions, even billions, have been voted for public improvements, municipal, State and Federal—enough to provide work for thousands of men for many, many months to come, both on the highways and in the factories behind the highways.

The nation's housing requirements alone are enough to keep the forces of construction busy for three years at least, and billions must be spent.

We have created our own dye and chemical and other industries, which make us more than ever independent of the rest of the world, economically.

There is a real need for the products of every lumber mill, of every textile establishment, of every steel plant, of every factory turning out essentials.

We say the country's statistical position is good. It is more than good—it was never better. Every material factor that enters into the equation of prosperity is present. There are but two disquieting factors and both can be corrected. One is the drastic deflation policy, and the other is a state of mind brought about by that policy.

It is no more possible for the present condition to continue than it is for the sun to move backward. No prices can permanently remain below cost of production. There is no Government on earth, no board, no association of men, no conspiracy, no anything that has the power to keep prices below cost. It is admitted by everybody that prices for the great basic farm crops are below cost of production. They cannot remain so; they must go up. It may be that retail

prices in some lines will go lower, but basic farm prices are way below the surface and they must come up for air. Postponement of buying will be fatal. The time to buy is now. We look for this fact to be more and more emphasized during the next few weeks. When it is firmly established in the minds of the people there will be a great buying movement. Stabilization of prices is not going to be at a less-than-cost figure; it is going to be on the basis of cost of production plus a legitimate profit.

The drastic deflation policy of the Federal Reserve Board cannot continue much longer. It has been made militantly effective during the recess of Congress, when, the President being ill, there was no authority competent to overrule the Board. Congress will not get well seated before the arrogance of the Board will show signs of subsiding. Deflation has ceased to be a question for the decision of the Federal Reserve Board. It is a question for Congress itself to decide. It involves the broadest possible phases of national policy, and Congress, not appointive boards, makes national policy.

We look, therefore, for an easing of credits in the near future. It is inevitable. No business administration would permit anything else.

The nation is as sound as a young horse. It simply has a case of nerves. The "scare" nerve has been exposed and a clique of Government officials and bankers have been scraping it on the raw. This idea of underlying strength is everywhere apparent. Business gives the appearance of being sure of itself ultimately. It is not going to require much education to change the dubious mind into the sure mind. The depression is psychological. The source of it is the Treasury.

The wheels of commerce will everywhere be set in motion again if the Treasury will pay the sums due the railroads, and they in turn will place their delayed orders for equipment. It is their paramount duty so to do. They have been generously treated and must treat business generously. Let the War Finance Corporation be revived. Let discount rates be lowered, but borrowing be restricted to legitimate business. Let communities, everywhere, that have construction projects in view, begin to place their orders for materials. These are emergency remedial measures which can readily be put into effect. Immediate betterment of conditions is required and is possible.

We have little faith in legislative nostrums for economic relief in general, but where it is perfectly apparent that depression is solely the result of bad government policies and bad administration, it is obvious that the way to effect a cure is to remove the causes. Government is not asked to create prosperity, but to quit obstructing prosperity.

The President-nominate—he will not be elected until the electoral vote is cast—will have solemn conferences with leaders of American thought in Marion early in December. We expect that there will issue after these conferences a statement from Mr. Harding in regard to economic conditions that will inspire confidence throughout the nation and induce the faint-hearted to rush ahead and prepare to get their share of the general prosperity that is surely coming. The old saying of the elder

Morgan is as true now as it was in his day—"always be a bull on America."

Shame on us that we doubt! In wealth, real and potential, there is none to compare with us. Our problems are almost insignificant in comparison with those confronting other nations. That is why their millions are struggling to get across the ocean and share our assets. We have everything except a good financial policy and that, fortunately, can be changed. We cannot be forgiven if we sulk. "Spit on your hands and get to work!" The reward will be certain.

The dawn began to break November 2, as millions of men who voted without regard to their previous political affiliations then guessed and now know. They cast their ballots in favor of prosperity; they voted against drastic deflation, and woe betide the Republican party if it fails to obey the mandate given! What men voted for they will get—the removal of governmental obstacles from the path of prosperity. They voted for the right to make a living, the right to earn a profit. The obstructionists are about to be swept out of office. They are already discredited, and without prestige. As sure as light follows darkness, an era of great prosperity is ahead, and now is the time to get in on the ground floor.

The economic factors are so decisively favorable to good times, under wise administration, that panic and ruin are no more likely than universal flood and famine. American business is too strong inherently to be bound and held back permanently by obstructionists. There is only one way for the nation to go and that is forward.

### THE PERSISTENT MENACE OF SOVIETISM.

**R**UMORS of an impending recognition of Russia in some form by our Government are so frequent that it is impossible to disregard them. There must be something brewing or the clamor would cease.

The report from London that a wireless dispatch from the Soviet Government openly affirmed that "There is information that England is carrying on agitation in the United States in favor of a renewal of trade relations with Soviet Russia," and that "Foreign newspapers more and more frequently state that the American Government will not place obstacles in the way of its capitalists trading with Soviet Russia," should be enough to warn our people that an attempt is being made to have us pull someone's chestnuts out of the fire.

Unfortunately, this news is closely followed by the ridiculous statement from Washington that our Government officials are intimating that recognition of some sort at this time might check the advance of the Soviet aggressions in Europe. This would indicate that somebody in Washington is desirous of finding a possible excuse for welcoming the anti-social monster of Soviet Russia into the family of nations. Surely it is a strange way to combat this gravest peril that has threatened civilization to give it free intercourse with all the world, and opportunity to pursue its propaganda with the mark of approval of this great nation upon the impossible system it has created. Mr. H. G. Wells has recently characterized Sovietism, in its effects as seen by him in Russia, as "a vast and irreparable catastrophe" \* \* \* and Mr. Wells himself is a socialist! Again he declares that "Never has such a disaster been recorded in history." The men responsible for this catastrophe are Lenin and Trotsky. How can our Government, for a single moment, seriously consider recognizing these agents of destruction?

The paltry fleeting commercial benefits to a few men who

desire trade between this country and Russia is of no consideration beside the terrible danger to the nation involved in opening the doors to the spread of the pernicious doctrines of the Soviets. We have just witnessed a comforting alignment of labor with the conservative masses at our recent elections; it was evident that the red agitation had lost its force and that true Americanism was in the ascendancy. Even Mr. Gompers has recognized the election as a mandate for him to aspire to conservatism as the only solid rock on which to stand. Is all this to be undone by giving to the red demons of Russia an opportunity to again spread seeds of disorder among us? Every American who loves his country should protest with all his energy against such a frightful misstep as this would be. It is useless to talk of guarantees from Lenin that he would not use such an opportunity for the dissemination of his doctrines. He is on record in dozens of formal statements as saying that no promises given to "capitalistic Governments" are binding on those who aspire to sovietize the world.

### THE UNITED STATES IS NOT A SUBJECT FOR COLONIZATION.

**M**ILLIONS of the lower classes in Europe are striving to escape the economic consequences of the war by emigrating to the United States. This country is the Mecca. Additional thousands of subsidized incendiaries are entering by stealth. A case is reported in the daily press of a ship which arrived with a listed crew of more than 1000, most of whom deserted, as arranged, and are now at large in the United States. Our prosperity has made us the lodestone for the yearning populations of the world on the one hand, and the object, on the other, of the bitter hate of anarchists and revolutionists who see no hope of overturning civilization so long as this nation stands firmly on the ground.

Foreigners that come here are easy prey for political bosses. They are herded together and voted in blocks. They will be equally easy prey, in many cases, for agitators who rely on the ballot box to accomplish their purposes. We cannot afford to bring ten or twenty millions of the lowest-class foreigners into this country during the next ten years. They would be a menace at the polls. They might fill the offices with demagogues, for most of them have lived all their lives in the atmosphere of revolt and have not been trained in the traditions that make democracy safe in America. The electoral situation of itself would make the restriction of immigration imperative.

We should permit no anarchists, revolutionists or incendiaries to enter. We should restrict all other immigration to the digestive capacity of the melting pot. So many thousand a year we can digest; why permit any more than that to enter in any one year?

The tests will have to be carefully thought out. A literacy test is not sufficient, for the most dangerous aliens are those who can read and write. The advantage of an arbitrary numerical maximum must be carefully considered in addition to all other restrictions. This still must be a land of refuge for the oppressed, as always, but the gates can no longer be left wide open. For ten years at least the immigration tests must be more drastic than any heretofore employed.

### GIVING BILLIONS TO EUROPE.

**S**ECRETARY HOUSTON has consistently opposed any further Government loans to Europe. He evidently thinks it is better, by slashing prices, to give Europe half the value of the American cotton and wheat and other crops. He is as right in the first instance as he is wholly wrong in the other.

## The Nation's Greatest Industrial Leaders Show the Way Out

WE have consistently contended that the control of our banking system by professional bankers is detrimental to the welfare of the country and must inevitably result in the adoption of policies which fail to take into proper consideration the necessities of commerce and are certain to be short-sighted and constrictive.

There has been for some weeks an impression that the United States Steel Corporation, which has been adhering with fidelity to the scale of prices agreed on at the time of the ill-fated industrial conference in Washington, March, 1919, would announce price reductions. Judge Gary, however, declares that "we have decided to recommend to the presidents of our subsidiary companies that the present base selling price of all commodities continue in force unless and until it becomes necessary and proper to make changes to meet altered conditions."

Judge Gary, in March, 1919, took the very sane and sensible read and carefully considered by every business executive and by every responsible officer of the Government:

**"We think stability in business is of the highest importance and that every man, to the extent of his opportunity and ability, and even at some sacrifice, is obligated to assist in stabilizing and maintaining prices on a fair and sane level. The producer, consumer and workman will be benefitted by this attitude."**

The policy of the Government, for more than a year, has been to beat prices down without inquiry as to the economic justice of so doing. It has, it is true, appointed commissions and employed statisticians to see that the railroad workmen and the miners were guaranteed a fixed income for their labor, based on the cost of living, and no politician has dared or cared to organize or be responsible for a propaganda drive to force wages down. Quite properly so. But in the effort to satisfy the workman, it has been deemed advisable not only to increase his income, but also at the same time, to compel other people to sell him their goods at less than cost.

This persistent drive, put into effect not only by the institution of policies that would undermine price levels, but reinforced also by the power of propaganda which is inherently the possession of those holding high official positions, has been most persistently carried on by the Federal Reserve Board and the Treasury, aided by the bankers whom they dominate. It has been an assault on assets, a hammering campaign, and it has cost the people of the United States, the estimates run, anywhere from five to fifteen billions of dollars. It has admittedly swung the pendulum so far back that commodity prices are as far below what they ought to be as they ever were above what they ought to have been. Moreover, by some strange psychological process, millions of American people were persuaded that this was a necessary aftermath of the war and they were witnessing nothing but a natural process. It was fate that was bringing disaster.

The whole theory is knocked into a cocked hat by the statement of Judge Gary, who knows more about economics and business in one minute than the whole Federal Reserve Board combined ever will know, fallible though he is. That is a simple statement of fact. Against the whole specious structure of fallacy and theory so carefully built up by Secretary Houston and Governor Harding, Judge Gary delivers a shattering wallop. He says that every decent man "is obligated to assist in stabilizing and maintaining prices on a fair and sane level."

It does not require any great amount of brains to understand that the world after the war is quite different from the

world before the war. There has been added to the cost of production of every bushel of wheat and every pound of cotton and every ton of steel the interest on a world debt of about 250 billions of dollars. That is a fact which every man should get well fixed in his head. In addition, there has been added to the cost of production of every product the vastly increased and onerous cost of government, probably equal in amount to the interest on the war debt. In the progressive nations there has been added, too, the cost of maintaining new standards of living. To reduce prices down to pre-war levels, therefore, is to lay on production a prohibitive tax. There is but one way in which pre-war prices can be permanently established, and that is by repudiation of the war debt and drastic reduction of government expenditure, one of which things is not desirable and the likelihood of the other is problematic.

Moreover, to attempt it is an evidence of the revival of barbaric worship of a symbol. Equilibrium in the commodity plane of prices is desirable, and that was rapidly being brought about. If the proper relationships were being maintained, it did not make any difference whether the symbol of exchange happened to bear the one or the two-dollar mark. The attempt to bring about quick liquidation has resulted in a situation where the laboring element is receiving wages based on a high price level and the producing element is receiving a below-par return. Water will not run uphill, and such a condition cannot endure.

Judge Gary, in March, 1919, took the very sane and sensible view that steel prices should be fairly based on cost of production, and declined to accept the unearned profits which his corporation might easily have demanded. It is a pity that all American business did not do likewise. But Judge Gary was no more wise then, in holding prices down, than he is now in demanding that they be kept up to a fair level.

Charles M. Schwab is also quoted as endorsing the attitude of Judge Gary and stating that the present abnormal condition is brought about by a cessation of buying, due to the belief which has been inculcated in the people that they have only to sit still and wait for prices to go down. He thinks that buying will begin again when it is evident that prices are not going down. Few industries are so well organized as the steel trade, and agriculturists, of course, cannot issue an enforceable dictum to the effect that such and such a level of prices has been found to be fair and will be maintained. But if the state of mind which Mr. Schwab contemplates can be established, so far as the steel business is concerned, the sympathetic influence on all other business will be very great. If the cotton-grower, for instance, could prove that his cost of production was such that 40 cents a pound was a fair price and should be adhered to for this crop, and had power to make that decision operative, stating at the same time that falling prices would justify in all probability a reduction of cost for next year's crop, it would be a fine thing for the nation and for the world.

The American deflation program and the unscientific attack on prices are responsible not only for the trade slump in the United States, but also for the depression throughout the world. It is what has caused moratoriums in Latin-America and forced many of the most important export commission houses in this country to ask for an unofficial moratorium. There are pouring into the ports millions of dollars' worth of goods consigned to Latin-American countries which have cancelled their orders because their own markets are demoralized. The price collapse, in fact, is a world calamity, worse than the Garfield "workless days" and comparable in the ruin it is causing only to the Hun depredations in Belgium.

The insane obsession for lower prices, irrespective of the economic facts, has been carried to a fearful extreme. It is



time, indeed, for somebody to cry "Halt." That is what Judge Gary has done, if we interpret his statement correctly, and the effect should be remarkably good. It reveals a sobriety of judgment quite in contrast with the absurd statements

some of our leading bankers have been making in their attempt to justify an unjustifiable policy, and it is the sort of judgment that we expect to characterize the Harding Administration when it takes charge of the destinies of the nation.

## The Enormous Decline of Value in Farm Products

COMPARING present prices of farm products with the average prices of July last there has been a decrease, as recently shown in the MANUFACTURERS RECORD, of almost \$7,000,000,000 to \$8,000,000,000; but comparing prices of November 1, as reported by the Department of Agriculture, with the same month of last year, there had been a decrease at that time of some \$5,000,000,000 to \$6,000,000,000 or over. However, prices have in many cases heavily declined since the Government's estimate of November 1. At that time, for instance, the average of corn was given as 87½ cents per bushel, whereas in many places in the West corn is selling at 50 cents and even less. Cotton was quoted at an average then of 22 cents per pound, which is far above the price of today. It is quite safe, therefore, to estimate that comparing the prices of today with the same time last year the decline would show \$7,000,000,000 to \$8,000,000,000.

Based on estimated production and value of 26 crops, the farm value of the country's agricultural output, including livestock and products, for this year will probably not be more than \$18,000,000,000, compared with \$24,000,000,000, the value of the combined agricultural output of 1919. This means a probable decrease in farm product values of about 25 per cent. Moreover, it must be remembered that the crops raised during the past season were the most expensive to produce in the country's history.

The estimated farm value of the 26 crops listed on November 1 is \$10,289,000,000 (November 1 prices), compared with \$13,637,000,000 in 1919, a decrease of \$3,348,000,000, or nearly 25 per cent.

The eight principal cereal crops show a production this year of 5,878,000,000 bushels, compared with 5,544,000,000 bushels produced in 1919, an increase of 334,000,000 bushels, or 6 per cent. Because of the decline in prices the farmers would

receive for these crops even on November 1 average less than \$5,513,000,000, as against \$7,470,000,000 received in 1919, a decrease in value of \$1,957,000,000, or 26 per cent. In 1918 the farm value of these grain crops was \$7,073,000,000 and in 1917 \$6,978,000,000.

The production of 3,197,000,000 bushels of corn for 1920 is the largest in the history of the country. Though it is 282,000,000 bushels larger than the 1919 crop, the farm value for this year, based on November 1 prices, would probably not be more than \$2,792,000,000, or a decrease in value compared with the 1919 crop of probably more than \$1,140,000,000 for this one crop. The real decrease, due to still further decline in price now going on, will probably be nearly \$1,500,000,000.

The estimated value of the 1920 wheat crop is about \$1,400,000,000, or \$600,000,000 less than the value received by the farmers for their 1919 wheat crop. The wheat crop this year is reported at 750,000,000 bushels, or 190,000,000 bushels less than last year's yield. It is 55,000,000 bushels short of the five-year average production of 1911-1915.

It is estimated that in 1920 the South has produced 1,513,000,000 bushels of corn, wheat and oats, receiving therefor about \$1,500,000,000. In 1919 the yield of these three grain crops was 1,536,000,000 bushels and their aggregate farm value was \$2,218,000,000. The estimated value of the 1919 cotton crop on November 1 prices would be about \$1,164,000,000, compared with \$1,924,000,000 in 1919 based on November 1 prices of that year. For these four crops, corn, wheat, oats and cotton, the South through the credit restriction campaign that artificially forced down prices regardless of economics and law of supply and demand will probably not receive more than \$2,700,000,000, a decrease of \$1,400,000,000, or over 33 per cent, compared with \$4,142,000,000 received in 1919.

ESTIMATED PRODUCTION AND FARM VALUE, NOVEMBER, 1920, OF PRINCIPAL CROPS OF UNITED STATES, COMPARED WITH PRODUCTION AND VALUE, DECEMBER 1, 1919, AND FIVE-YEAR AVERAGE, 1911-1915. COMPILED BY MANUFACTURERS RECORD FROM MONTHLY REPORTS OF UNITED STATES DEPARTMENT OF AGRICULTURE.

Crop.	Production, 1920. Preliminary Estimate, November 1.	Farm value, 1919 Preliminary Estimate, November 1.	Production, 1919. December 1.	Farm value, 1919. December 1.	Average production, 1911-1915. December 1.	Average farm value, 1911-1915. December 1.
Corn, bushels.....	3,199,126,000	\$2,792,336,000	2,917,450,000	\$3,934,234,000	2,754,164,000	\$1,644,511,000
Wheat, bushels.....	750,648,000	1,411,218,000	940,987,000	2,024,008,000	806,361,000	705,890,000
Oats, bushels.....	1,444,411,000	787,203,000	1,248,310,000	895,603,000	1,230,499,000	473,133,000
Barley, bushels.....	191,386,000	156,362,000	165,719,000	200,419,000	197,211,000	114,389,000
Rye, bushels.....	77,893,000	110,685,000	88,478,000	119,041,000	41,399,000	31,903,000
Buckwheat, bushels.....	14,321,000	18,760,000	16,301,000	24,026,000	16,514,000	12,127,000
Rice, bushels.....	52,298,000	95,000,000	41,059,000	109,613,000	25,266,000	22,370,000
Kafirs, bushels.....	148,747,000	141,309,000*	126,058,000	163,452,000	50,000,000*	50,000,000*
Total grain, bushels.....	5,878,830,000	\$5,513,373,000	5,544,362,000	\$7,470,396,000	5,121,414,000	\$3,054,323,000
Flaxseed, bushels.....	10,736,000	\$25,777,000	8,919,000	\$39,145,000	18,615,000	\$26,120,000
Beans, bushels.....	9,364,000	30,919,000*	11,488,000	49,181,000	.....	.....
White potatoes, bushels.....	421,252,000	498,341,000	357,901,000	577,581,000	362,910,000	219,137,000
Sweet potatoes, bushels.....	105,676,000	129,030,000	103,579,000	138,085,000	60,267,000	42,525,000
Peanuts, bushels.....	37,499,000	65,248,000*	33,262,000	79,839,000	.....	.....
Peaches, bushels.....	44,623,000	111,307,000*	50,424,000	100,868,000	.....	.....
Pears, bushels.....	15,558,000	28,004,000*	13,902,000	25,000,000	49,027,000	50,481,000
Apples, bushels.....	236,187,000	307,043,000	147,457,000	274,859,000	11,341,000	9,392,000
Clover seed, bushels.....	1,593,000	20,995,000*	1,099,000	29,067,000	215,571,000	152,399,000
Onions, bushels.....	15,132,000	17,886,000*	9,412,000	20,028,000	.....	.....
Total food and feed, bushels.....	6,776,350,000	\$6,738,923,000	6,281,816,000	\$8,804,049,000	.....	.....
All hay, tons.....	106,451,000	\$1,857,569,000	108,666,000	\$2,189,619,000	86,587,000	\$962,634,000
Sugar beets, tons.....	8,812,000	\$0,000,000*	6,421,000	64,000,000*	5,839,000	32,864,000
Broomcorn, tons.....	37,000	4,649,000	52,000	8,102,000	.....	.....
Cotton, bales.....	12,123,000	1,175,931,000	11,030,000	1,967,143,000	.....	709,629,000
Tobacco, pounds.....	1,476,444,000	269,111,000	1,389,458,000	542,547,000	14,175,000	101,885,000
Hops, pounds.....	38,893,000	20,000,000*	29,346,000	22,656,000	.....	.....
Sorghum syrup, gallons.....	37,402,000	40,000,000*	33,312,000	35,000,000*	.....	.....
Cranberries, barrels.....	432,000	3,500,000*	541,000	4,520,000	.....	.....
Total value, 26 crops.....		\$10,289,683,000		\$13,637,636,000		\$5,450,000,000*

\*Estimated. †Based on October 15 price.

## War Finance Corporation Must Be Revived

**M**ORE or less widespread propaganda has been appearing in different newspapers with the intent of making it appear that the demand for the revival of the War Finance Corporation is a scheme to have the Government loan money to farmers wherewith to hold their crops and force prices up. A typical example is an editorial which appeared in the Washington Post of November 18 and which would seem to have been inspired by Secretary Houston himself, so full is it of misinformation and so closely does it follow the misleading statements which Secretary Houston previously had given circulation.

Senator Calder, who as chairman of the Senate Committee on Reconstruction has been conducting hearings throughout the country and who is intimately advised, therefore, of the serious and even critical condition of affairs, has telegraphed Secretary Houston demanding that the War Finance Corporation be revived. In addition to this telegram, Senator Calder issued a statement in New Orleans in which he said:

"We have a surplus of commodities and foreign countries have a great need for them, but they have no money with which to buy. It has been strongly urged by the producers of animal and agricultural products in the cities which we have visited that we should make every effort to revive our export trade through the agency of the War Finance Corporation, which is able to extend credit to American exporters and bankers upon good foreign securities.

"Delegations of cotton growers have come to me in New Orleans, Memphis and St. Louis; representatives of farmers and wheat growers have come to me in Kansas City, Omaha and Des Moines; producers of animal products in Kansas City, Omaha, St. Louis and Denver, all with the same story—that there is a backing up of trade from your ports of export and that if this continues and increases it will bring about serious consequences of unemployment and financial strain."

He also announced that he would introduce, as soon as Congress convenes, a resolution that "will remove from the Secretary's mind any possible doubt as to the intention of Congress when it amended the War Finance Corporation Act on March 3, 1919, so as to provide that this Government agency should continue for one year after the proclamation of peace by the President."

The arbitrary, autocratic, ignorant and vicious decision of the Secretary of the Treasury to suspend the operations of the War Finance Board, against the advice and protest of its managing director, and his abuse of authority by undertaking to veto an Act of Congress, will stand for all time, we think, as the transcendent blunder of the reconstruction period. Men far more knowing than he, more versed in practical economics and trade, more blessed with vision, sitting in solemn session as the representatives of this great people, analyzed with exacting care the probable trade condition of the world, took cognizance of the credit conditions in Europe, and with a view not only to maintaining an outlet for American products but also to the revival of industry in Europe, decreed that a fund should be set aside for assisting in the financing of foreign trade. It involved no loans to foreign governments, but moderate advances on commercial transactions where every dollar involved would be protected, generously protected, by commodities in transit or in process of manufacture. It was understood that this financial aid would be given only if needed. The time was limited to one year after the proclamation of peace, not to a definite date, because Congress understood that if there was delay in making peace the expected crisis would certainly arise.

The South was groaning with supplies of low-grade cotton.

The Czecho-Slovakian banks and textile interests proposed to buy some of this cotton, some 300,000 bales of it. Czecho-Slovakia is the strongest economically of all the "new" nations. She has within her limits the best part of the manufacturing facilities of the old Austro-Hungarian monarchy. She is a leader in reconstruction. There was offered to her industries an immediate market for cotton goods. They needed the raw material. They wanted to pay for part of it in cash. They wanted credit on the rest, credit until they could manufacture the raw material and sell the finished goods. Here was a case where the War Finance Corporation could function exactly in the lines Congress had intended. Here was a chance to benefit greatly the United States and perform, without cost, at the same time, for Czecho-Slovakia a real service—better than charity. And just as the negotiations were being concluded, in the crux of the situation, Secretary Houston ordered the War Finance Corporation to cease operations.

The fact speaks for itself and he who runs may read.

What does this mean internationally? Why, for more than a year the raw material banks of Holland have been advancing raw materials to Germany in just the manner outlined. Holland is no mean competitor in world trade. And those shrewd British traders were not asleep. They put into effect over a year ago their export credits scheme, whereby the Government has assisted in financing exports to the new states of Europe, and within the month the British Government has extended that credit scheme so that aid is given up to 100 per cent of the cost of the exported articles, instead of 80 per cent as formerly, and British goods are flowing into the named territories when American goods cannot move at all.

In such circumstances, when consideration of international trade conditions alone would logically compel the War Finance Corporation to act, quite aside from the necessity for it to assist American industry, our Secretary of the Treasury, assuming dictatorial powers, has the impertinence to say that the whole thing is just a conspiracy to inflate the prices of farm products and that he cannot be a party to so foul a proceeding. It staggers the imagination.

There is not and there has not been any effort to have the Government advance funds for the relief of farmers. Two years after the great war began it became apparent that the United States must intervene and advance to the cause of civilization, primarily for her own protection, unlimited funds and unlimited offerings of life and blood. Two years after the great war it is just as apparent that the United States must intervene, primarily for her own protection, to safeguard civilization by assisting in the rehabilitation of certain parts of Europe. In the one case we were caught totally unprepared. In the other case Congress adopted in advance a sane program of preparedness and the Secretary of the Treasury vetoed it.

There is a great difference between the functions inherent in the War Finance Corporation and the advance of money by the United States to foreign governments. We lent those governments ten billions wherewith to wage war, a destructive thing. The billion to be used by the War Finance Corporation is for the financing of commercial transactions. It does not contemplate an invasion and negation of private initiative and enterprise. It demands both as a prerequisite to help. It offers no charity to Europe. It does promise credit facilities to Europe in cases where a commercial or industrial opportunity is to be taken advantage of, to the good of those to whom the credit is extended and to the great benefit also of American industry and trade. It is not proposed to advance money to be squandered, or to advance funds which may

never be returned. It merely undertakes to aid when American citizens wish to lend for a term of months their raw materials or finished products to European interests, to be paid for when those interests have been able to market the "loaned property." It is not only business-like, but is in accordance with orthodox principles of trade. Our failure to expedite exports in this way merely penalizes our commerce to the benefit of competitors, and in penalizing our commerce penalizes also the producers of America. We are laying up good ships as well as laying off good workmen. No wonder the American Mining Congress has also lifted its voice to demand the re-establishment of the War Finance Corporation.

We have no patience with men of the Houston type who are animated by the belief that ruination and reconstruction are synonymous terms. They are obsessed with the idea of lower prices. They are not content with the orderly processes, the natural processes, but insist on hurrying them along. No wise physician gives quinine in 80-grain doses. The object is to save the patient, not to kill him. But the Houston method of cure is vociferously of the "kill" type. The man seems actually to gloat as he watches the wheat and cotton and commodity markets dropping to panic figures. "If we can get prices down to where great volumes of products represent but a small number of dollars there will be no banking strain" is the solemn sort of nonsense Secretary Houston and the Federal Reserve Board give vent to, and they find in that all the excuse they require for the ruin they have caused.

Some thousands and tens of thousands of agriculturalists have already had not only their profits but their savings and even their land holdings swept away by the price panic. It is too late to help them. But the prompt re-establishment of the War Finance Corporation, if the administrative hands of Secretary Houston can be kept off its operations, would immediately do much to revive confidence and would certainly be of enormous value in reviving American trade in Europe. It is the solemn duty of Congress to vindicate its own powers, as well as do a big constructive thing, by taking time, even under pressure, to instruct the Treasury as to its duties and order it specifically to carry out the established Congressional policy. The Calder or some similar resolution should be adopted promptly.

### THE SHIPPING BOARD.

IT is just as well that the truth about the Shipping Board operations is being brought to light after instead of before the elections. Otherwise there would have been a suspicion of political motive. With the elections out of the way, most citizens will agree in demanding the most thorough inquiry, and will accept the facts brought out. Moreover, there will be a chance to bring to justice the plunderers and defrauders who took advantage of the nation's travail to defraud and cheat the taxpayers.

Haste makes waste, and always will. No organization can be hurriedly got together and spend a billion or more dollars in a few months without appalling extravagance. That is a fact well recognized by all engineers. Before Hog Island was even begun, one of the biggest engineers in the country, who was doing the preliminary work, stated to the writer that millions would necessarily be thrown away in the attempt to get the necessary quick results. Such waste was properly to be charged to war cost and written off as part of the tribute to unpreparedness. It might be called the unavoidable waste.

But the evidence all shows that in the crisis some cunning men saw their opportunity for theft on a large scale. They went at it in a scientific way, pillaging right and left. Their patriotism was all in their fingers. They had no itch for fighting—the itch was in their palms. Their conspiracy of plunder was the more easily carried through because the

Shipping Board itself was a cat fight in the beginning. It never did get started right.

We do not doubt that there is truth in the charge that many of the accusations made are inspired by Bolshevik influences, with the object of discrediting all government. The dastardly way in which it was sought to involve the President's immediate family relatives in charges of bribery would indicate as much. Moreover, competition on the high seas is becoming acute, and the powerful propaganda bureaus of foreign nations would not weep if our merchant marine were discredited and the people refused longer to support it. It is well, therefore, not to be too rash in jumping to conclusions. Infamous as the grafting has been—so infamous that there are in the vocabulary no words sufficiently denunciatory—the fact remains that we have, nevertheless, a magnificent merchant fleet. It is the most modern fleet on the seas, well built for the most part, three-quarters of it oil-burning, and it is actually saving the nation millions of dollars annually at this time by keeping ocean rates down. Had our commerce been dependent these last two years on foreign bottoms, as it was before the war, we would have been paying exorbitant rates for service, and our foreign trade would have been at the mercy of our competitors. Even with all the waste and graft and criminal extravagance, the investment is not a bad one.

But what is certain is the necessity of a thorough housecleaning. The achievements of the men appointed to the new Shipping Board by President Wilson have not been so distinctive as to justify the belief that they would be able to cleanse the Augean Stables. Nor would it be fair for President Harding to have one of the most important agencies of his administration under the control of political opponents. The President was in no haste to make the appointments. He delayed action all summer, at tremendous cost to the shipping interests of the nation. A little longer delay will be more beneficial than destructive. It would make for confidence, therefore, if the Senate declined to act on the recent appointments, but left the situation open for Mr. Harding to name his own men to man the Shipping Board for the next four years.

An investigation can disclose the blunders that have been made; what the nation wants are assurances of such future administration of the Shipping Board as will be a guarantee against further mismanagement.

### "CAN'T MAKE THEM WORSE."

IN republishing some of the facts from the MANUFACTURERS RECORD about the evil influence of the work of the Federal Reserve Board, the Press of Abbeville (S. C.) says:

"The foregoing, we think, will furnish the readers of this paper with the reason why cotton has fallen 10 or 12 cents per pound in price in the last 90 days; why the goods of our merchants are on their shelves; why men 'loaf' in their own stores, where they might otherwise be busy; why the farmers, after performing their labor, are denied the just compensation which other laborers received in the beginning of the year; why people over this section of the country are in reality in want, and why the conditions which surround us are more hard to bear than the conditions in 1907, 1914, or at any other time.

"No wonder the American people in the recent election revolted and kicked out the powers which make these conditions possible. If the Republicans when they come into power next March cannot make conditions better, they certainly will not make them worse, unless all the lands, property and other possessions of the people are bodily confiscated. The Federal Reserve Board, actively backed by the Treasury Department at Washington, has gone as far in this direction as it is humanly possible to go. Let us hope that at least some relief will come to the suffering people of the South from the party which it has so long despised, and that some of the incompetence which is cursing the country may be gotten rid of. Let us hope that we shall get rid of those agencies which first rob us and then try to cover their ill-deeds by denying that they commit them."



## Panama Canal Tolls a Question that Must Be Reopened and Passed on Anew.

A STUDENT of treaties and diplomatic practice, in a personal letter to the editor of this paper, declares his belief that the Hay-Pauncefote Treaty definitely deprived us of our right to grant preferential treatment to American ships using the Panama Canal. He agrees, as do some of the nation's trading men, with the position of President Wilson, who virtually compelled Congress to recede from its intention of permitting American ships engaged in the coastal trade to use the canal without payment of tolls.

The clause of immediate importance in the Hay-Pauncefote Treaty reads as follows:

"1. The canal shall be free and open to the vessels of commerce and of war of all nations observing these rules, on terms of **entire equality**, so that there shall be no discrimination against any such nation, or its citizens or subjects, in respect of the conditions or charges of traffic, or otherwise. Such conditions and charges of traffic shall be just and equitable."

The British contend that this prevents any preferential treatment of American vessels, whether engaged in the coastwise trade or not, and that is an interpretation which is accepted by President Wilson. Those who agree with him, in the main, argue that the treaty provision was plainly unwise and indefensible, but they maintain that John Hay nevertheless accepted it, knowing full well what he was doing, and that there was no doubt in his mind as to the full meaning, purport and consequences of the concession. He was, it is claimed, simply outmaneuvered and persuaded to sacrifice American vital interests.

If the British position is well taken—and it is at the present moment the American official position also—it means that in time of war enemy naval vessels must be permitted to use the canal with equal freedom with our own. If, to illustrate, a Japanese fleet, intent on ravaging our Atlantic Coast, were to demand passage through the canal, we should be compelled to accord it, or else deny the right of our own dreadnaughts to use the waterway. That is what, under the Wilson conception, the treaty would seem to bind us to. Yet, although this Government receded from its position on the tolls question, it has never accepted this other logical conclusion. It has, on the contrary, spent millions in fortifying the canal. Nor is there any doubt whatever that, in case of war, our Government would use the canal for its own purposes and deny its facilities to enemy vessels either of war or trade, but to do so would immediately violate Mr. Wilson's interpretation and make of our treaty "a scrap of paper."

The situation, we think, is seriously complicated by recent developments in connection with the Kiel Canal. The German Government has been holding up munition ships bound to Danzig through the canal on the ground that, Germany being neutral in the Russo-Polish war, she could not permit the passage of the ships. But the Treaty of Versailles provides that the Kiel Canal shall be free to international traffic, and the Council of Ambassadors notified the German Government that the ships in question must at once be released. They were released.

If this Government accepts the proposition that its control over the Panama Canal is a limited control, subject to equal treatment of all ships, naval and merchant, of all nations, it thereby recognizes an equitable right in the conduct of the canal by every other nation, and the question of whether or not such equal treatment is being given would become an international question, subject to interpretation by an international tribunal. That such a tribunal would be influenced by the status of the Kiel Canal we do not doubt.

We have never been able to accept the view that the words "of all nations" meant "of all nations, including the United

States." The natural view would be that they meant "of all nations other than the United States." Even if John Hay did have the British idea in his mind, we are confident that the Senate did not so interpret the meaning of the treaty when it ratified the instrument. The weight of intellectual or even historical authority may be the other way, but not the weight of common sense. Certainly, the people of the United States built the canal under a misconception of what they were doing if the British view is correct. They were told that the canal would be an American highway, bringing together the two coasts, and safeguarding our nation in war by permitting our warships to pass equally from one ocean to another, and not until the canal was virtually completed was it even suggested that we had signed away the right to give our coastal ships free passage. Indeed, the voyage of the battleship Oregon around Cape Horn to take part in the Spanish War crystallized the nation's determination to build an Isthmian canal. Surely no sane man can think it was our intention to give equal privileges to war vessels of other nations. If England or other nations thought so, why did they not protest against our fortification of the canal? Their failure to do so shows that they knew it was our canal and that they had no right to protest.

If there was a meeting of minds between Pauncefote and Hay the other way, there was no meeting of minds so far as the American people were concerned.

We hold the honor of the nation as sacred and would prefer to vindicate it at no matter what cost rather than hedge on a contract. But we want to be mighty sure that our honor is involved before we make tremendous sacrifices, and it is not essential that we should always construe words to mean what is most beneficial to others and most disastrous to ourselves.

It is suggested that there is a way out, if the British view is accepted, by general legislation relieving from the payment of tolls ships of all nations engaged in their domestic coastal trade. That would be equal treatment, but the United States would be the chief beneficiary. This is a suggestion full of merit and may have to be resorted to if other expedients fail.

But we are convinced that the first and proper thing to do is to examine the situation *de novo*. That is Senator Hardings' intention. He will, we do not doubt, suggest to the British Government that if its view is correct, the treaty was accepted by the American people under a misapprehension as to its meaning. He will ask, we think, the opening of new negotiations with the object of defining more clearly American rights in the canal and recognizing specifically the preferential treatment to which our own coastal and naval vessels are entitled, and which they should get. If such negotiations should fail, we doubt if Congress would be willing to let the situation remain as it is, but would insist on toll exemption for our coastwise vessels and decline to be bound by the British reading of the treaty.

We are the more convinced of this because the evidence is gradually leaking out which shows that the surrender by Congress of the American viewpoint was obtained by coercion and under duress. In urging his plea for what he termed vindication of the nation's honor, President Wilson stated that he was confronted with an international difficulty of the first importance, so delicate that he did not dare disclose it and that he would not know what to do or how to act unless Congress followed his suggestion. It is now charged that the international difficulty was a threat of war by the Japanese and that the price of British influence to prevent the Japanese attack was American compliance with the British

view on Panama Canal tolls. Since then, we have been informed by American army and naval officers who were in the Far East at the time that they were officially notified of the probability of a Japanese attack, that they were instructed to make ready for it, and that it was well understood that war would be avoided only if Congress followed the President's advice.

We are humiliated even by the thought that a surrender of the nation's vital interests could have been brought about by such means, and we like to believe that the President's change from militant advocacy of our right to give free tolls to American ships to even more militant advocacy of the contrary position was brought about primarily by intellectual processes rather than duress. Nevertheless, the fact remains that for six years our ships would have been going through the canal free of charge had not Congress been coerced by the President's warning of grave danger. It does not take a prophet to forecast how another Congress would vote on the same proposition when not influenced by threats.

The various and diaphanous codes of international law relating to neutrality, the abrogation of treaty law in time of war, etc., may be brought forward as modifying our superior rights in the canal in case of war, with particular reference to the use of the canal by enemy ships, but the fact remains that under the interpretation of the Hay-Pauncefote Treaty which Mr. Wilson advocated, the Panama Canal is not an American canal at all, but is an international highway for which we have the high privilege of paying the expenses. We built it, but it is not ours. We were bamboozled out of it in advance.

Our historic policy has been that American ships only could participate in our coastal trade. The canal is part of our coast line. It is on American territory. None denies our right to prohibit foreign vessels from trading between New York and Seattle. It is a trade exclusively for our own ships. So was it known definitely to Great Britain that a primary purpose in building the canal was to facilitate this coastal trade by bringing the Atlantic and Pacific coasts closer together, and, it being a trade in which no foreign ships could participate, the right of our coastal ships to free use of the canal did not appear to be a debatable question. Why did England not bring the issue to the fore earlier if intending ever to do so? Equal rights to ships of all nations, yes, even perhaps with our own in foreign trade, but certainly not penalty tolls on American ships engaged in a trade in which no foreign ships can compete.

The whole question must be reopened and decided anew on equitable and fair grounds.

American public opinion will never be satisfied with the present status. It creates a condition certain to be unfavorable to the close and lasting friendship of the English-speaking peoples—a friendship essential to the peace and prosperity of the whole world. Great Britain, less than the United States, can afford to be a party to such a conception of the ownership of the canal. It is bad international policy for her to occupy such a position. It is not a good thing for her to take advantage of an ambiguous phrase in a treaty when she well knows that the other party to the contract—the people of the United States—never contemplated that sort of an agreement. It would be better for her to accept a new agreement about which there could be no doubt.

The Panama Canal tolls question has not been settled. The great battle has just begun.

## GERMANY ALREADY CAPTURING STEEL TRADE.

IN its weekly iron and steel market review, the Iron Age says:

"Germany's slightest move in exports gets much notice. In

Cuba and South America domestic wire works have felt German competition lately. More noteworthy is the loss to Germany of a 5000-ton tinplate order from the Dutch East Indies. A Chicago mill quoted 3.25 cents, equal to 2.87 cents Pittsburgh. A European mill—the country not being named—also captured a 20,000-ton rail order for the Dutch East Indies against American competition."

## HOW A SOUTHERN DEMOCRAT CAME TO REALIZE THAT SOUTHERN INDUSTRIES AND AGRICULTURAL INTERESTS NEED A PROTECTIVE TARIFF.

IN a recent letter accompanying an article on "What Is the Matter with the Cattle Business and What Can We Do About It?" and addressed to the Southern Tariff Advocate, the forthcoming official publication of the Southern Tariff Association, Fort Worth, Tex., Mr. Geo. W. Armstrong, one of the leading business men of that State, makes some particularly forceful statements relative to his advocacy of a protective tariff and the necessity for such protection to the livestock and agricultural interests of the South.

The letter is as follows:

"I am a recent convert to a protective tariff. I have been a Democrat all of the years of my life, and still count myself one, although strongly opposed to the present National Administration. I believed in a 'tariff for revenue only' for some years after I became interested in the cattle and iron and steel business. Prior to the war, my iron and steel business suffered from Belgian competition. Iron and steel make excellent ballast, and due to that fact the ocean freight rate from Antwerp to Galveston was less than the railway rate from Fort Worth to Galveston. So firm was my faith in a 'tariff for revenue only' that this did not even jar me.

"The fact is, I cannot tell just when I changed or what consideration influenced me, but it was some time during the early stages of the war. My iron and steel competition then came from a steel plant at Monterey, Mexico, reputed to be German-owned. I believed then, as I do now, that our great steel and other industries had been fostered and built up by a protective tariff. I saw these industries furnishing munitions and supplies to the Allies, who were unprepared and sorely pressed. I saw that there was no other country from which they could get them. I realized what a catastrophe might have happened to the world and to us but for our tariff-protected industries, our protective-tariff policy, against which I had so often railed.

"And then I saw the German army, superbly organized, prepared and equipped, and the German nation fighting the world, proud and haughty and unafraid, and that, inspiring the confidence of this army and people, were years of the most careful preparation for war, mammoth steel and other industries, all on a war basis, lacking only the one essential, raw material. I saw the English grimly prepare for a long and bloody war, relying upon starvation for victory. The embargo and the submarine warfare in reprisal were both for the purpose of starvation. I realized then, as I never realized before, the great strength of our country, having within its boundaries all of the raw material and the basic elements of life and strength to armies and people in war and peace. I realized then that our sugar rationing was in part due to a mistaken tariff policy. I realized then how important it is to the welfare of this country to protect its industries and agriculture against the competition of cheap labor or more favorable conditions.

"Since I have permitted myself to question the soundness of my early political doctrines, I have become a strong protectionist. My iron and steel business is in no immediate danger of European competition on account of the after-war conditions in those countries, and it may not need tariff protection for some years. But the farmers and livestock producers now need it far more than does the manufacturer, and the need will grow as time advances. This is particularly true of the cattlemen, sheepmen, corn, wheat, rice, peanut, sugar-cane and cotton growers. These are all basic industries necessary to our prosperity in peace and strength in war. We must protect them, so that they will prosper and keep step with the increasing demands of our great and growing country."

## A Builder of the South—Daniel A. Tompkins and His Life Work\*

IN the same year in which the MANUFACTURERS RECORD was established—1882—a young man, who had left his home in South Carolina and worked his way through a technical college, who had then spent years in machine shops designing and building machinery, afterwards going to Germany to erect machinery for an American firm, settled in Charlotte, N. C. He was without capital, and practically without acquaintance in that city. He secured the agency for the Westinghouse engine, but as it was a new and novel device its introduction was exceedingly slow. Establishing a small machine shop, he worked as a machinist with his hands and as a genius with his brain.

This young man, D. A. Tompkins, by inherent strength of character and brain, by the most tireless energy which we have ever known, became one of the greatest of the industrial leaders of the South, and for many years was probably more widely known as an industrial upbuilder and creator of manufacturing industries than any one of the other great leaders of that day.

D. A. Tompkins was a marvelous genius. It is difficult to speak in sober words of a man who accomplished so much and of such a wide variety. He was the leader in the development of the cottonseed-oil industry of the South, and the machine company which he organized became the recognized leader in the building of oil mills from Carolina to Texas. Tompkins planned and built more than 250 oil mills, but he did not concentrate his energy on one industry. He worked with equal activity in encouraging and building cotton mills, and he gave much of his time to the encouragement of the organization throughout the South of building associations, with a view to enabling people of small means to own their homes.

He did not, however, center all of his activities even upon these interests, for he was constantly on the go, living for many years a greater part of the time in sleeping cars and in boarding-houses and hotels, working wherever he might be with a tireless activity and a broadness of vision which made him a dominant power in Southern development. He became a leader in many of the great organizations of the country, such, for instance, as the National Association of Manufacturers, in which for years he took a leading part. Wherever he went, or into whatever organization he entered, he almost instantly became a dominant figure, for men everywhere recognized the strength of his intellect, the clearness of his vision, the safety of his judgment and the fullness of his knowledge.

Two interesting facts in connection with his work are typical of the life which Tompkins led and the work which he accomplished. Shortly after he opened his office in Charlotte he called upon the writer, who had only a few months before met him for the first time. Tompkins was on his way to New York to sell a cotton mill for one of his clients to the American Cotton Oil Co. He said that he did not believe that the organization was being wisely effected, nor did he believe in any one concern absorbing all of the cotton-oil mills of the South, which that company apparently had planned to do. But as his client was anxious to sell a mill, he was on his way to effect a sale. In the course of his talk he outlined the reasons why, in his opinion, newly-built mills with modern equipment could produce oil at a profit, when the old mills, many of which were out of date, but which were being bought by the American Cotton Oil Co., would scarcely be able to exist. He was asked to write his views on the subject. Within a few days we received and published the first article in a proposed series to cover the whole cotton-oil situation. This was marked No. 1, with the statement that other articles would appear in fol-

lowing weeks. But the next week passed by without any word from Tompkins. We wrote him and wired him urging the importance of completing the series. This brought a visit from him, and he explained that the more he had studied the subject for the preparation of the series of articles promised, the more he was impressed with the strength of the situation, and that he had used all the data gathered and put it in the form of a prospectus for a proposed oil company, and he had sent this to a large number of the big consumers of cotton oil. It met almost instant cordial reception, with big subscriptions promised. The company was soon organized as the Southern Cotton Oil Co., with a subscribed capital of \$2,500,000. All this preliminary part of planning the company and raising the capital had been accomplished, as we remember it, in about 30 days. It was then along in April or early May, and it was necessary that these new mills should be built and in operation by early October for the coming cotton crop. Tompkins instantly centered his whole energy upon planning eight mills, to cost each about \$250,000, and the selection of sites all the way from Carolina to Arkansas and Texas. By early October every mill had been completed and was ready for the new crop.

That was merely one illustration of Tompkins' activities and the energy with which he pursued every plan that he undertook.

About twenty-five years ago, at the time when Tompkins was one of the directors of the Seaboard Air Line, the MANUFACTURERS RECORD received a letter from the late Wm. C. Lovering, then president of the Arkwright Club of Boston, an association of cotton manufacturers, asking for certain information about water-power opportunities in the South in connection with cotton-mill building. The letter was referred to Tompkins. He immediately saw the opportunity and suggested to E. St. John, then vice-president of the Seaboard Air Line, that an official invitation from the road should be extended to Mr. Lovering to appoint a committee to come South and study cotton mill possibilities. This invitation was sent through the editor of the MANUFACTURERS RECORD, and five leading cotton-mill men of Massachusetts were named as a committee. They came South, and from Norfolk were for the next 10 days the guests of the Seaboard Air Line. There were some eight or nine of us in the party, and the trip was regarded as of so much importance that the Associated Press sent a correspondent along in order to keep New England papers advised as to the movements of this committee. The trip covered the cotton-mill regions of the South as they then existed along the Seaboard Air Line.

The Southern Railway asked for the privilege of taking the entire party through the mountain regions of Western Carolina, and the Seaboard accepted the invitation. The party thus had the opportunity of seeing, for the first time for most of them, the wonders of the Western Carolina mountain region.

D. A. Tompkins was with the party during the entire trip, and took the responsibility of giving them the detailed technical information needed. The vice-president of the road was also along, and the president joined for a few days. As an immediate outcome of that trip the five New England men and their associates built five cotton mills, each costing over \$1,000,000, including the Massachusetts Mills, near Rome, Ga., by the company of the same name in Massachusetts, controlled by Mr. Lovering and his associates; the Lindale Mill, near Gadsden, Ala., and other mills of which these were but types.

These two achievements typified Tompkins' ability to see an opportunity and seize it. A little later on, with a view to encouraging the industrial development of the South, he pur-

\*Based on "A Builder of the New South; Being the Story of the Life Work of Daniel Augustus Tompkins," by Dr. George Tayloe Winston; published by Doubleday, Page & Co.



chased the Charlotte Observer, and in connection with Mr. Caldwell, who was associated with him in ownership and management, the Observer became the leading spirit among the daily newspapers of the South in encouraging industrial development. Tompkins had a nose for news which enabled him, wherever he might be, whether on the train, in a hotel or in private conversation, to catch everything whatever out of which a good piece of news of an industrial character might be developed. His notebook was ever ready, and a line or two jotted down on some casual conversation, some chance remark in the sleeping-car, some speech in a great assembly, would furnish him the basis of a news item or an editorial pertaining to the development of the South. He made the Observer the foremost secular paper in the country in the exclusion of sensationalism and in the publication of facts about the material things of life. He told the men in the Observer office that the improvement of a farm or the building of a factory was a far more important piece of news than some cutting or murdering scrape or sensation. "If," said he, "you want to publish sensations, have a man live at the Chicago Morgue and he can supply you daily with all the sensations of murders and suicides that you can publish. But, in my opinion, that is not good newspaper work. The stimulation of local interests, the publication of news which adds to the employment and the betterment of mankind is infinitely more important than is a story of a murder or of a divorce, or of an elopement." With that spirit dominating the Observer office, it soon became not only one of the cleanest daily newspapers which this country had ever had, but one of the most intensely interesting and helpful in the upbuilding of that section.

Shortly after getting the Observer on its feet Mr. Tompkins and his associates established an afternoon paper and developed a feature not found in any other daily paper in the country. He had always held the view that the cotton-mill operatives should regard themselves as people of importance and not feel that they were doing a low class of work, or, as he often expressed it to them, "they should not feel sorry for themselves." One of his homely expressions in many addresses to them was "Don't stick out your sore toe for public sympathy." He tried to instill in the cotton-mill operatives in the early days, when their pay was exceedingly small because of the conditions then prevailing, that they should realize that they were doing a work of importance to the world. They should hold their heads erect, take pride in their work and feel that the opportunity in it was in proportion to their own initiative and force of character.

With the idea of developing this spirit throughout the entire cotton-mill region tributary to Charlotte, he secured the services of a very bright young woman for his afternoon paper and had her spend her entire time visiting the people in the cotton-mill towns. He instructed her to mingle with them and to send in from every mill reports about what the operatives were doing; taking the ground that it was just as important that they should have mention made of their names, and their marriages, and the deaths in the families, as it was for the society people of Fifth avenue, or Newport, or the other great cities of the country to have their social events recorded.

This young lady was told to secure from all these mill villages photographs of female operatives. No photograph was to be accepted taken in mill costume. The young women who wanted their pictures published must bedeck themselves in their best clothes and take as much care in securing a good photograph as would a society woman. This, too, was with a view to stimulating self-respect. The result was the publication day after day for several years of many columns of gossip news about cotton-mill operatives, which was of intense interest to these people. The pictures of the young women,

afterwards published on fine quality of paper, showed a strength of character and an attractiveness of face matching anything that would be found in the columns of society papers of the country.

Things of this kind for the betterment of people and the stimulation of their ambition were one of Mr. Tompkins' fads; a hobby in which he ceaselessly worked for the advancement of mill operatives and other people of small wages. Years before Henry Ford announced his proposed scheme of a minimum of \$5 a day, indeed, some years before Henry Ford's first car was built, Mr. Tompkins, in discussing the economic questions of the day, said to the writer that he hoped to see the time come when no man would receive a lower wage than \$5 a day, and he enthusiastically elaborated on what that would mean for better education and for the uplifting of mankind generally.

Mr. Tompkins was a protectionist Democrat. He believed thoroughly in the necessity of an adequate protective tariff. He was likewise enthusiastically in favor of a subsidy to our merchant marine, and on this point made many addresses before meetings of the cotton manufacturers of the South and other business organizations. He believed that there could be no full development of our foreign trade until the American flag, subsidized by the National Government, floated over a great fleet of vessels reaching every important port in the world. Sailing on a ship over which floated the Stars and Stripes any American, said he, would have more strength and force with which to sell goods in foreign lands, than if compelled to travel abroad under some other flag. He held that there was no section of the country which was more directly interested in the upbuilding of a merchant marine through protection than the South, and he emphasized the fact that in early days, when railroad building was so popular, counties, towns, cities and States vied with each other in offering a bonus, or a subsidy, to railroad builders; and he saw no reason why the National Government should not give to ocean transportation the same hearty co-operation which municipalities throughout the entire country had given to the development of railroad transportation.

On the last day that Mr. Tompkins and the writer spent together, he ordered an old slow-going horse and surrey, with his old colored body-servant as driver, that we might quietly roam the surrounding country and unobstructedly talk of olden days and of the future problems of our country. He referred to his invalidism as permanent and said: "I am simply waiting patiently for the Master's call."

Shortly after the death of Mr. Tompkins, on October 18, 1914, his executors persuaded Dr. George Tayloe Winston, one time president of the University of Texas, and also of the University of North Carolina, and of the Agricultural and Mechanical College of North Carolina, to undertake to compile out of the letter files and the speeches and the pamphlets and the books of Mr. Tompkins a story of his life, in order that it might be an inspiration to others, and that it might put into permanent form the work of one of the master builders of the South. Dr. Winston has done his work in a way worthy of the subject and into this story he has woven so many facts in regard to Mr. Tompkins and his lifework and the development of the South that his book, "A Builder of the New South: Being the Story of the Lifework of Daniel Augustus Tompkins," should be found in every college library not only in the South, but in the country, and in the library of every man who wants to understand some of the conditions which prevailed in the old South prior to the war, and trace through Tompkins' life the change from ante-bellum days to that full flush of prosperity which Tompkins lived to see, and in which he was such an important factor.

Dr. Winston has written the story of Mr. Tompkins' life with exceeding clearness and absorbing interest. When he

undertook the work he found among Mr. Tompkins' papers the letters written when he was a young man to his fiancée, whose early death caused Tompkins to remain a bachelor through life. After her death these letters were returned by her family to him, and tied up with them were her letters to him; but, fortunately, the sacredness of this correspondence has not been exposed to public gaze. Someone once said that the New England people were so thrifty that many New England lovers wrote their letters with the idea that after they were dead their heirs would be able to make money by publishing their love letters, and many books of many love letters have helped to enrich some families. But Dr. Winston knew better than to open to public inspection the heartbeats of these lovers. He did, however, pick here and there from some of Tompkins' letters, though never a line from hers, little statements dealing wholly with his work and the conditions under which he was laboring, whether in the machine shop, in the drafting-room or over in Germany. These sentences gathered here and there illuminate something of the inside spirit and life of Tompkins, and never a one, with one exception, touches on the sentiment which he felt for the loved one so soon to be taken away. That one was wisely published. It is in itself a gem in literature, for it is a rare tribute from a hard-working student of mechanics, driving day by day in the drafting-room and the machine shop, to the woman to whom he gave his love and in whose companionship he had anticipated the joys of life. It is worth publishing. Here it is:

"You are to my better self an invaluable mine from which jewel after jewel is added to my refinement and my feeling and my mode of thought, to make them delightful to myself and pleasant to all who know me. You are to me what the sun is to a flower, that lights it up and makes it beautiful and fragrant. My life until I knew you was but as the seedling of a flower that could become nothing beautiful so long as it remains away from the nourishing light. You have already nourished this life and given it sufficient strength to weather quite a stormy night, but it needs your goodly rays on the morrow to regain new strength and keep it well, alive and prosperous. And to continue our metaphor still further, as the shades and tints of a flower can never be seen by any light so well as by that which makes it, so the refinement you have lent me could never be appreciated so well as when I am under your immediate influence."

Rest thou in peace, beloved friend, great leader in thought and work and industry. Thou didst hear and answer "the Master's call," for which thou didst wait patiently through five years of suffering and invalidism. In thy life and work is inspiration for every young man in the South.

### TO SAVE CHILDREN FROM STARVATION.

THE appeal of Herbert Hoover and the Literary Digest for money with which to save millions of European children from starvation, published in the MANUFACTURERS RECORD of last week, is touching the hearts of the poor and the rich alike. Some of the letters received by the Digest from very poor people, white and black, show how they sacrifice in order to give. Here are a few such letters:

"I am a negro and only a poor workman, but my heart goes out to these children, so here's my check to save one."—J. M. R., Louisiana.

"I earn the living for myself and family by mending old shoes. I need for ordinary use all that comes to me. I am educating my children as far as able \* \* \* but enclosed is a check for the destitute children."—W. D. H., Colorado.

"I am a coal miner, 73 years of age. I work six days every week and pump water out of the mine on Sundays. I enclose \$10 in currency, and will scratch up another, I trust, very soon."—E. J., Illinois.

"I have had 12 long years of sickness in my family, and it has taken at times more than my salary to meet expenses, but want to help even if it pinches. Enclosed \$20. Hope to send more later."—W. H. Y., New Jersey.

"The \$90 enclosed is a collection made up by the staff and patients in this institution, all suffering from pulmonary tuber-

culosis—even the members of the staff have had it. A great many of the patients are not able to pay their own board and treatment, and this sum represents a sacrifice on their part to help the suffering children."—Dr. E. W. G., Supt., Georgia.

"Your appeal was read to our boys in chapel. The result was a subscription, entirely unexpected and voluntary on the part of 60 boys for the starving children in Europe. The boys on this industrial farm are without other means than hard earned pennies for work and behavior here."—E. B. H., Supt., New York.

"The enclosed \$9 represents an entire week's earnings of a colored washerwoman who wants to help feed the hungry children."

"Words fail to express the emotions with which I send you this letter. I am a poor workman living by my daily wage. I am enclosing my tithing money consecrated to the Lord's work."—S. A. E., Delaware.

### CONGRESS MUST ACT.

WHATEVER the pressure on Congress at the short session, it must stop long enough in its consideration of the supply bills to safeguard American interests in those cases where any further delay will assuredly be followed by grave consequences.

There are two things which Congress can and ought to do immediately. They are:

1. Revive the War Finance Corporation and have it function as Congress previously ordered.
2. Pass an Act authorizing the President, through the War Trade Board, the Tariff Commission or some other agency, to license or prohibit imports in cases where it is obvious that foreign dumping will ruin American industries unless immediate relief is afforded.

Such emergency legislation would be a counter-irritant to depression, would do much to restore confidence and would give impetus to the revival of trade. It would be of such vast benefit to the nation as a whole that Congress cannot afford to neglect it, even if night sessions are required.

### FOREIGN TRADE.

IT is always interesting to see ourselves as others see us. The letter to the MANUFACTURERS RECORD, which we publish herewith, presents our portrait as seen through East Indian spectacles. It is valuable as commercial criticism, stating some serious facts that admit of no discussion, and it is also entertaining as a piece of literature that makes this unconscious humor so pungently informing a lesson for our merchants seeking foreign trade.

"While we beg to thank you for receipt of your favor dated 11th of June, we have to advise that Messrs. Automotive Products Corporation, Inc., New York, have since paid up for our subscription to your esteemed weekly journal, up to 12th February, 1921. We shall renew our subscription in due course, for which please be at ease.

"We highly appreciate your writings as an exponent of America in matters economic and political. We also appreciate your counsels you give to the exponent merchants and manufacturers from time to time, in order that they may improve their methods of business. But we wonder that importers of this side still complain, and complain very much, about the treatment accorded to them by their American exponent friends. The writer heard two local bankers only recently remarking that the Americans take advantage of any and every facility offered to them by the importers from this side. You must be well aware of the terms of letters of credit an importer has to furnish his exporters with, yet we send you a copy for your perusal. The furnishing of these letters of credit against the sweet requests of several Americans seems to have been suicidal for many an importer of this side. We have been furnishing letters of credit to the Japanese and Japanese exporters since last six or seven years, but have not experienced a single trouble with it (the letter of credit as a basis). We admit Japanese shipped 'chalk' instead of cheese, but we never know where they did not compensate even for their such

faults. With a letter of credit in their favor, it is said, many Americans try to thrust their goods upon their importers. We do not understand why they should demand letters of credit from importers. Importers can import American goods through London merchants without furnishing any letters of credit. What is more, the local commission import agents charge their indentors only 2½ per cent, which they divide with their London house; the London merchants charge only one-quarter per cent, and demand no letters of credit, whereas the Americans grumble when they get less than 2½ per cent for themselves. How can your American friends develop their export business unless they understand the principles of present-day competition? We wish they had understood the principles early and won over the business otherwise passing away from their hands."

We recently had a similar letter from a large Italian house. Returning travelers bring the same story; they have been bringing it for decades, but it is even more significant now than it was before the war. It is said that our warehouses are overstocked with goods, and that we underestimated the potency of foreign competition. We did some guessing and to a large extent we guessed wrong. We held our manufactured goods for impossible prices and demanded impossible conditions from the foreign importer, so he let us keep them.

When the war began in Europe we pointed out that one of the first big booms would be in copper, but the American public, inexperienced in foreign commerce, failed to see what trade conditions the war would produce, and our copper shares fell while the mines were reduced to half capacity. Six months later there was a wild scramble for both shares and metal. After the war the public guessed wrong again, forgetting the vast stores of scrap copper and brass that had accumulated abroad, and attempts were made to sustain a fictitious market. Copper is now in the dumps, but with the certainty of a great revival in less than another year.

It seems that our people do not possess the genius for feeling the pulse of foreign markets, nor for establishing permanent relations with foreign importers. Without such relations we cannot feel the pulse of foreign commerce, and consequently we are reduced to guessing on half-knowledge, so that we miss where our British and French and German competitors hit the bull's-eye. Our foreign commerce, outside of the exportation of goods and raw materials, is essentially casual. We fill emergency orders and fail to "follow up." We do not enter into true commodity exchange, nor into industrial relations abroad that help to build our trade and our good-will. When the foreigner appeals to us for goods we treat him like an irresponsible bandit, regardless of the banking references he submits. We demand cash down in the local bank at the point of shipment on presentation of shipping documents without due effort to protect the purchaser against exorbitant freights. He asks for quotations c. i. f., with cash guaranteed by his bank through which documents and drafts may be sent payable on receipt of goods. "The American turns a deaf ear \* \* \* and our competitors fill the order."

Either we want foreign trade or we do not. It would appear that we do not care for it, except as a subject for oratory at the annual banquets of trade associations. We know of immense orders that were available abroad, but, as the merchants on this side said, "Our foreign correspondents could not arrange the credits," which meant that they would not put the cash in bank here, with freight costs unprotected. Why should they, when they can send to London or Liverpool and buy the same goods on a firm quotation based on delivery at their home ports?

Our export brokers, as our East Indian correspondent points out, demand 2½ per cent for their own services in addition to having credits established that are the same as spot-cash. This brings up a vital question, one that has been discussed fruitlessly with American would-be exporters for decades. We want too large a margin of profit. The Eng-

lish merchant obtains credits with which to do business abroad on the department-store principle of large sales and small profits. That is the basis of the world trade that brings tribute from every port in the seven seas to the coffers of Great Britain. We can do likewise or not, as we please; we can take it or leave it. But it is foolish for us to talk about foreign relations unless we actually have foreign relations. These, considered in the Wilsonian sense of purely political relations, cannot exist, and have no reason for existence, except in response to close and intimate foreign trade relations. Trade is the foundation of business, and business is the foundation of politics. The real league of nations is the economic league, which is the one ligament that binds nations together.

## DECREASING GOLD PRODUCTION.

RECENTLY the MANUFACTURERS RECORD pointed to the steady decrease in the world's production of gold, which is especially conspicuous in this country, and suggested that American bankers and business men need to give very careful attention to the meaning and the influence of this declining output of gold at a time when the world needs gold as never before.

This situation is discussed by the Harriman National Bank of New York in one of its recent advertisements, in the course of which it made the following statements:

"Have you read Congressman Louis T. McFadden's analysis of the report of the Gold Committee delivered at the recent meeting of the American Bankers' Association at Washington?

"Do you know that with the increase in all commodities, 112 per cent in 1919 as compared with 1914, gold was virtually the only commodity fixed in price, so that it could not respond to the law of supply and demand? Otherwise, gold would have gone to a premium corresponding to the average increase.

"The price of gold is fixed at \$20.67 per Troy ounce. That is the price which the United States Treasury will pay for pure gold, but while the increased cost of producing in every line has been fully covered by the price to the consumer, plus a profit, gold mining alone produces at the higher costs of today and sells at an unchanged price. Do you wonder, therefore, that gold mining has ceased to be profitable and that our production has fallen from \$101,000,000 in 1915 to less than \$50,000,000 this year?

"Regard the comparative percentages of world production, for this year estimated:

	1915.	*1919.	1920.
	Per Cent.	Per Cent.	Per Cent.
United States.....	21.5	16.6	12.0
British Empire.....	63.7	70.0	75.0

"Please note that for over a year the British Empire has been paying an exchange premium as high as 50 per cent to its gold producers, and that France imposes a sumptuary tax of \$3.60 per ounce on gold used industrially, while the United States has rendered this industry no assistance whatsoever.

"The Harriman National Bank will send a copy of Congressman McFadden's address to any one requesting it."

The Harriman National Bank has taken the lead in broad, intelligent, sensible advertising among the New York national banks. Every advertisement is replete with serious discussion of various questions, and many views expressed in its advertisements are in advance of those held by many bankers, but they are views which to a very large extent must sooner or later be accepted in whole or in part by this country, for as pointed out in this advertisement, we cannot permit the gold situation as outlined in this advertisement to continue to grow more acute without very serious trouble in the future.

## Independent in Thought.

T. L. KIRKPATRICK, Chairman Citizens' Highway Association of North Carolina, Charlotte, N. C.—THE MANUFACTURERS RECORD ought to be in the home of every citizen in the United States. It is one of the real potential papers of the country today. Think for itself: is capable of thinking, and thinks wisely.



## THE LEAGUE METHOD OF DESPOILING NATIONS.

A FEEBLE minority, noisy and officious as minorities usually are, has urged, since the impressive negative of the American voters last November, that the League of Nations is on probation, subject to our acceptance with modifications. This is to stultify the electorate of this intelligent country that twice has repudiated all of President Wilson's international works.

So far as America is concerned, the League of Nations is not on probation; it is on exhibition, and its malignity grows more manifest with each move of the nations under its provisions.

Daily new iniquities come to light; steadily the disillusionment concerning its guarantees of peace grows stronger. The miraculous international brotherhood, that was to change the nature of man and incline all nations to peace, has already lost its virtue and is calling loudly for force—the word that was to have been blotted out. The delegates now gathered at the Geneva Assembly are lamenting the inability of the League to command respect, to make its orders stick. Mr. Balfour in open meeting severely criticised the League's want of material force, which the delegates all attribute to the impractical idealism of Mr. Wilson. Mr. Balfour is reported as having said: "Good intentions are the foundation of good politics, but they are useless unless there are means to carry them out." In view of the strained relations unfortunately existing between England and France over questions in the Near East, and of the fears of Spain for her control of Northern Morocco and its iron mines, it is unlikely that the Assembly will agree to a change in the structure of the League that will put teeth into it. The dominance of one of the great Powers is frightening the other members of this world super-government.

They have become the more sensitive on noting a tendency to extend the authority of the League over raw materials. The spokesman on behalf of carrying out this principle was the Belgian delegate, Senator La Fontaine. Being the representative of a very small country, almost wholly dependent upon the rest of the world for the supplies essential to keep its factories going, he was the natural mouthpiece for voicing a principle in which England was equally interested. The principle could hardly be more frankly and brutally stated than in his own words. He demanded "community of raw material." Continuing, he expounded the doctrine practically as it was presented at Paris by Mr. Wilson's delegation of American sympathizers and sycophants. "I consider the earth," he said, "a unit as to property rights, from which mankind as a whole must derive full advantage in equal manner. But the various areas of the earth are not endowed in every part with the same resources. Certain nations have an advantage over others, and some arrangement should be perfected by which no nation should have priority rights, but these material advantages should be dispensed for the common good."

This speech was not made at a meeting of Red agitators, but was given by a plenipotentiary representing a nation of hard-working people before the assembled representatives of more than half the world. It is the doctrine of Lenin! It was also, we acknowledge with shame, the doctrine that was presented by our own representatives at the deliberations at Paris that resulted in the League of Nations.

Some of President Wilson's advisers had even published a book expounding this astounding doctrine of universal expropriation of property, and a plan was set forth for allocating minerals throughout the world in future along the lines that had been followed of necessity by our War

Industries Board during the war. It was presented under the supposedly alluring guise of "conservation," in which ultimate economies of distribution of finished products played an important part. In other words, it would not be economic for the Bethlehem Steel Co. to move its iron ores to Sparrows Point from its great El Tofo mines in Chile; the logical thing would be to move the ore, once loaded on ship, to the steel works of Great Britain at the mouths of British coal mines, and then have the short haul for the finished articles to the continent of Europe.

We do not pretend that the book, which was the fore-runner of papers specially prepared as a basis for discussing the principle at Paris, stated the case in so raw a manner as that, but, translated into action, that is what the principle leads to. The nations that, by hook or by crook, could control the requisite influence in the League, regardless of the natural demands of trade and fundamental laws of supply and demand, would commandeer our copper, our cotton—allocated by super-government order to help some other nation that was short. No consideration is given to the development of national life dependent upon these resources; nothing is said of superior skill or business ability in creating and maintaining industry. It is the law of the jungle—one beast has found something good and the other beasts agree to take it away from him.

It is lucky for America that, before being committed to this fundamentally unsound association of nations, the League should be on public exhibition. The performance at Geneva is not adding to the respect of Americans for this creation of President Wilson and General Smuts.

### Spreading the Light.

W. S. COURSEY, Raleigh, N. C.—I enclose herewith check for \$3.50, and would thank you to send the MANUFACTURERS RECORD for six months to Rev. J. A. Ellis, 208 Hilkrest street, Raleigh, N. C. Kindly advise Dr. Ellis that this subscription was entered at my request.

Your editorials during the war and before election were wonderful. Keep up the good work you are doing.

### All Sections, All Industries and All Labor Alike Need a Protective Tariff.

THURSTON T. HICKS, Henderson, N. C.—The Republican side of my nature, which dominates in campaign years, was and is pleased by the fact that you as the exponent of the business thought of the South supported Harding and Protection. The politicians of the South have been happy the past eight years because they held the offices. They are sad now that they must step down and out. Little has their concept of things been able to do for us.

This is to congratulate you on your position and to encourage you to show forth the good to come to us from protection. And I hope you will see that our agricultural interests will be further promoted by naming a big Southern Republican as Secretary of Agriculture.

### "Sweating Blood Trying to Hold Cotton" Against the Evil Work of the Federal Reserve Board and Secretary Houston.

A. G. HAMMETT, general merchandise, Shreveport, La.—I am enclosing you my check to cover year's subscription to the MANUFACTURERS RECORD.

It is useless for me to say that I have always appreciated this publication, when after seeing my first copy immediately subscribed for same and will never be without it again as long as I can sell cotton at all. The assistance that you have given us of the South trying to get a fair price for our products brings praise from everyone who knows of the effort. We are still sweating blood trying to hold our cotton, and will continue to do so until we get nearer cost of production, or the court sells it for us.

We read in the daily papers of the suffering from lack of coal in the northern part of the country, and I wonder if the papers up there have anything about the negro and white farmer of the South suffering from lack of clothes, and the mental agony of knowing whether he will be able to feed his family through this winter or not. Each tenant as well as landowner is in the same boat. If his cotton is sold at prevailing prices he will not be able to meet much more than one-half, and in many instances not half, his year's expenses.

# Senator Harding Makes Strong Appeal for Development of South

[Special Correspondence Manufacturers Record.]

News Orleans, La., November 19.

President-elect Harding was given one of the most remarkable receptions New Orleans ever tendered a public man, regardless of party, when he visited this city November 17 en route to Panama.

He made three speeches—one on the front steps of City Hall, one at a banquet in his honor by the Association of Commerce and one in front of Elks' lodge. Thousands of persons were at the depot to greet him on his arrival; thousands heard him at the two public speeches and lined the streets when he passed from one part of the city to the other, and at the banquet 350 of the leading business men, bankers and manufacturers of this section heard what was declared to be his most important speech before assuming office. He was given an ovation everywhere. He was in the city five hours.

The elimination of sectionalism, protection and the League of Nations were his principal themes.

Senator Harding said, in part, in the City Hall speech:

"You are more concerned with the prosperity of America than with the affairs of the Old World. And I cannot understand why Louisiana should not be behind the party that stands for protection in America. I want Louisiana to have the same feelings as they have in Ohio.

"I want America to be self-reliant, to be independent economically, a nation that can rely on its own resources and its own people; a people united and of one purpose, not a partisan North against a partisan South.

"I am glad to hear that there was recently held in New Orleans the Southern Protective Tariff Congress. If protection has brought industrial independence to the North, it will bring the same to the South. There is no good in protection that is not shared by all America. Protection of the American sugar crop would have meant millions to the people of America. I would speak of these things just as readily if they were not partisan questions. They are important to the welfare of America above partisanship."

In the Association of Commerce speech Senator Harding said, in part:

"We have been talking about the New South for a score of years or more. It is new in spirit, new in development. I would like to see it new in realization. I would like to acclaim a Southland with added good fortune and greater self-reliance through diversified agriculture, and I would like to see a Southland aflame with industry, with transportation ever a growing problem. This land of raw materials ought to manufacture and locate its factories by mine and farm and orchard. There will be no jealousy in the North, because your greater glory will be a glorious victory.

"Here we are today at one of the great gateways of the Latin America. Somehow I feel that the Western Hemisphere is our special field of influence and trade. Commerce marks the highways of friendships as well as rivalry. Our trade routes by sea to the South ought to be as dependable as the railway routes at home, and there ought to be significant and reassuring comity and concord among Americans, Central and North. Bind our friendship with the ties of trade, and we will make it indissoluble.

"We have ships now; we have the commercial foundations; our future lies in policies and practices. We must buy as well as sell, to be sure, but we need the expanding trade policy, its efficient agents in salesmen and credits, and the simple, practical understanding that commerce is the lifeblood of material existence. Our great assurance at home lies in a virile, intelligent, resolute people in a land unravaged by war, at enmity with no people, envying none, coveting nothing, seeking no territory, striving for no glories which do not become a righteous nation. This republic cannot, will not, fail if each of us does his part. If we but work and use thriftily and seek that understanding which reveals mutuality of interest, no difficulties can abide. Such a solution cannot come out of the greedy thoughts of the profiteer or the revolutionary agitation of those who would destroy. These

are but surface disturbances. We choose the deep and ever onward currents of normal America for the course of the republic.

"We haven't yet learned to combat destructive weather, and the law of supply and demand is eternal. But we may soften their rigors and minimize their penalties. We want fortune a common possession in America. We want the cotton grower of the South to have his becoming reward with the wool grower and the wheat farmer of the North. We want Southern factories to be tuned to the music of the mills of the North. We want our ports to send their cargoes under the American flag to bear the messages of peace and good-will to all the marts of the earth. There is no sectionalism in righteous American ambitions."

The Elks' speech was pitched upon similar lines.

President-elect Harding's trip to New Orleans is considered by the business interests as having immense commercial significance. His choice of New Orleans as the point of sailing for Panama, when he could have chosen other ports, focussed the attention of the entire country upon this port and its claims as the logical entrepot for the Latin-American trade. New Orleans is hundreds of miles closer to Latin America than New York, yet New York has been getting most of the business.

## Southern Realization of Need for Protective Tariff.

Greenville, S. C., November 18—[Special.]—Mill men here are beginning to talk of the need for a protective tariff as never before. The realization seems to be that something must be done to prevent this market from being flooded with foreign-made cotton goods at prices below anything prevailing here. The present low tariff and money exchange situation is viewed as practically an invitation to foreign manufacturers to go ahead and dump their goods here.

One mill man, discussing this situation, said: "I am 50 years old, but so far as voting is concerned I am 21, for this year I cast the first vote in which I used any of my own reasoning. I voted for a high tariff. Up to this time I had practically thought it was treason to do this, just because of traditions in my section, but I am through with traditions when it comes to politics."

## British Dye Industry Seeking Protection, Particularly Against German Imports.

Manchester, England, November 3—[Special.]—More determined efforts are now being made to secure protection for the British dye industry. Strong representations are being made to the Government in favor of a more pronounced policy with regard to importations, especially from Germany. Attention is being drawn to the larger receipts of dyestuffs, and certain interested parties are pressing the authorities to institute either a tariff or a limitation of imports.

## Great Chemical Meeting in New York Next Fall—British and Canadian Chemists to Gather.

After holding their annual meeting next fall in Montreal, Canada, the British Society of Chemical Industry will assemble in New York on September 7, 1921, for a convention with the American Chemical Society. The former organization has about 8000 members, while the American Chemical Society, of which Dr. Charles L. Parsons is secretary, has a membership of 15,000.

This joint meeting is an outgrowth of the closer relations developed among chemists of the two countries during the war, and one of the expected results is that the chemical forces of the world will come into a coalition in opposition to the German chemical industries, which to such a large extent dominated international trade and monopolized the dye industry.

The occasion will also enable American, Canadian and British chemists to interchange views on methods of manufacture and the choice of apparatus at the Chemical Exposition, which opens on September 12 of next year.

# Federal Reserve Board "Taxing the Commerce of the Country in an Unforgivable Way"

SENATOR ROBERT L. OWEN SCATHINGLY ARRAIGNS POLICY OF BOARD IN "CRUSHING PRICE OF SECURITIES AND BRINGING COMMODITIES DOWN TO PRICE BELOW COST OF POSSIBLE PRODUCTION"—MISLEADING STATEMENTS ABOUT BANK OF ENGLAND RESERVES—DUTY OF FEDERAL RESERVE BOARD TO IMMEDIATELY LOWER DISCOUNT RATES.

[Given below in full is a copy of a letter written by Senator Robert L. Owen to M. L. Requa of New York, and furnished to us by Senator Owen. The letter constitutes a remarkable arraignment of the Federal Reserve Board for its deliberate policy of deflating business and curtailing credits, needlessly bringing about a depression in business which is harmful to the country, and which cannot be justified. Pointing out the error in statements as to the high percentage of gold reserve maintained by the Bank of England, Senator Owen contrasts conditions in this country, where reserve notes are protected by the most gigantic gold reserve in the world. Keenly analyzing the situation here, from the standpoint of a banker himself and one of the authors of the Federal Reserve Banking System, Senator Owen's letter is a distinct contribution to the accumulative fund of information as to harmful blunderings of the Federal Reserve Board. As suggested by the Manufacturers Record last week, Senator Owen urges that one important measure of relief would be furnished if the Board would immediately lower interest rates. The entire letter should be universally read. Editor Manufacturers Record.]

United States Senate.

Washington, D. C., November 16.

Mr. M. L. Requa,

Care Sinclair Consolidated Oil Co.,  
120 Broadway,  
New York, N. Y.:

My Dear Mr. Requa—I received your letter with regard to the Babson memorandum comparing the bank reserves of the Bank of England with the bank reserves of the Federal Reserve Banks, and your request for my comment on it.

I am returning all the papers to you, and I have taken the liberty of making some pencil memoranda on their face in order to make clear my comment.

The Babson memorandum says:

"Many clients have asked us why Federal Reserve Banks should be alarmed over a ratio of 40 per cent when England is getting along on a ratio of about 15 per cent. The truth is that United States reserves are quite as low as those of England. The seeming difference is only in the methods by which they are calculated."

This statement is entirely unwarranted, and is grossly misleading. Unhappily, it appears to be based upon data taken from the Statistical Department of the Federal Reserve Board, and which has had the effect of even misleading the governor of the Federal Reserve Board himself.

The currency of the British Isles consists of Bank of England notes, \$139,900,000, secured by £121,000,000 of gold and the so-called "John Bradbury notes." On October 27, 1920, the Bradbury notes amounted to £352,796,058, against which there is in the Treasury in gold £28,500,000, equal to 8 per cent of gold, and Bank of England notes, £18,750,000, equal to 5.3 per cent, total cover 13.3 per cent. The actual gold reserve against the Bradbury notes is about 12.6 per cent. The gold reserve against the Federal Reserve notes is about 65 per cent.

The outstanding notes of the Bank of England emitted by the Issue Department against \$18,500,000 of Government debt and \$121,420,010 of actual gold held in trust by the Issue Department was \$139,920,010. Of these notes, \$15,821,185 was held by the Bank of England in its Banking Department, and \$18,750,000 was held by the British Treasury as security for the Bradbury notes, leaving \$105,000,000 in the hands of the general public and of the banks of England.

Governor Harding made a correct statement when he gave the reserve percentage of gold in the Bank of England against deposits for August 4, 1920, at 10.2 per cent, but it is a gross error to pretend to merge the trust gold in the Issue Department (held in trust for the noteholders) with the deposits in the Banking Department of the Bank of England, and then say that the reserve ratio of the Bank of England against notes issued and deposits makes a reserve of 44.8 per cent. It makes nothing of the kind. This trust fund in the Issue Department cannot be used to pay

deposits. The reserve against Bank of England deposits was, therefore, only 10.2 per cent on August 4, 1920, and it fluctuates around 12 per cent, which is entirely safe.

The Bank of England note is a gold certificate, with the exception that against the Bank of England notes is held £18,500,000 in Government debt and other securities, but there is actually 87 per cent of gold held against these notes.

There is no basis in law or in morals to assume the right to take this trust gold to pay deposits. In fact, the British Isles are not on a gold basis, and public opinion has supported the Bank of England in its avoidance of paying out the trust gold, even in exchange for the Bank of England notes, to pay which the gold is held in trust.

On last Saturday, in London (November 13, 1920), gold was selling per ounce at 121s. and 11d. (par \$85.). In other words, gold was selling at 45 per cent premium in London, and the pound sterling in Bank of England notes was at a corresponding discount of 32 per cent, corresponding almost precisely with the American exchange of \$3.30 to the pound sterling.

On the other hand, the United States is on a gold basis, and has the only perfectly free gold market in the world. The United States is in a position to maintain a free gold market because the world is now indebted to the United States in unliquidated balances of probably in excess of \$15,000,000,000, an indebtedness which is increasing because the United States has been shipping exports in excess of imports of approximately \$3,000,000,000 per annum. It therefore follows that the United States can command whatever gold it requires from the world if it should have any additional need.

As a matter of fact, therefore, in the statement of July 21 quoted by Babson, the actual gold reserve against the deposits of the Banking Department was only 87 per cent of the Bank of England notes on hand, and \$1,534,068 in gold—a total of \$14,298,000 in gold, as against \$136,000,000 of deposits, or about 10 per cent, of gold reserve against deposits. These deposits can be withdrawn at will.

On the other hand, it is very important to observe that the reserves of the member banks in America cannot be withdrawn at will from the Federal Reserve Banks under the law, and, therefore, no reserve is required against such deposits; but, as a matter of fact, the Federal Reserve Board is in a position under the law where it could liquidate these deposits in full, since the Reserve Banks have over \$2,180,000,000 of gold and the power to issue Federal Reserve notes against this gold to an extent that would enable the Reserve Banks to pay every deposit, in reserve notes and still have the reserve notes protected by the most gigantic gold reserve in the world, on top of Government securities and commodity bills underwritten by the member banks themselves.

On November 12, 1920, the Federal Reserve Banks held \$2,180,011,000 in gold, against which there were outstanding, in actual circulation, \$3,328,985,000 of Federal Reserve notes. In other



words, on November 12, 1920, the Federal Reserve Banks had 65.5 per cent of gold and legal tenders against the Reserve Bank notes outstanding, and even after deducting 35 per cent reserve against deposits which could not be withdrawn, the Federal Reserve Banks would still have 47.9 per cent of gold and legal tenders against the outstanding reserve notes. Besides this, there is behind the Federal Reserve notes over 35 per cent of good short-time commodity paper endorsed by solvent banks.

To compare, therefore, the deposit reserves or note reserves of the Bank of England, which is not on a gold basis, with the like reserves of the Federal Reserve Banks is a gross error, and shows no appreciation of the relative strength of the Federal Reserve Banks and the Bank of England.

Nevertheless, the English banking system is admirable, is sound, is making a very economical use of gold, and the Bank of England in its Banking Department, with less than \$80,000,000 of gold, is transacting the business of the world through London without fear, while American financiers are absurdly trembling in their boots with over twenty-seven times as much gold visible in the Federal Reserve Banks.

The disparity in favor of America is all the more conspicuous when you remember that there is practically no gold in the English banks worth mentioning, outside of the Bank of England and the Treasury above enumerated, whereas in the United States, outside of the Treasury, which has very large amounts of trust gold, and outside of the \$2,180,000,000 of gold and legal tender in the Federal Reserve Banks, there is in the American banks and with the public \$670,000,000 in gold and \$414,000,000 of silver, and nearly \$1,000,000,000 bond-secured currency to which I have made no reference. The amount of gold and silver current in England is extremely small, comparatively.

Comparing the strongest of the English banks, the 12 joint-stock banks, their outstanding obligations in deposits and acceptances in the last statement showed £1,955,200,000, against which they had £300,000,000 in so-called cash, but the cash consisted of Bradbury notes secured by 13.3 per cent gold, and Bank of England notes and their deposits with the Bank of England. Their deposits with the Bank of England, however, had only a gold cover of about 12 per cent.

If the total gold reserves of the joint-stock banks against their deposits are reduced to an actual gold basis, by taking the percentage of gold behind the Bradbury notes and the percentage of gold behind the deposits in the Banking Department of the Bank of England, the 12 joint-stock banks would be found to have less than 4 per cent actual gold reserve behind their deposits and acceptances.

And this need cause no alarm whatever. People cannot eat gold, and they are abundantly protected by public opinion. They are using the gold very economically, while America is using the gold very uneconomically.

I regret the Babson circular, because it has a tendency to shake public confidence in the stability of the American banking situation, which is as strong as Gibraltar, excepting individual cases where banks may be involved with customers suffering from the present fall in prices.

The great central banks of America and the Federal Reserve Banks have been DEFLATING credits for the last 12 months. It has resulted in deflating the credit of the United States and impairing the market price of Government bonds, crushing the price of many sound securities and bringing some commodities, like wool, down to a price below the cost of possible production.

The effect of deflation is shown on the deposits of individuals in the banks of New York city, which November 12, 1919, were \$6,313,998,000, while on November 10, 1920, they had been reduced to \$4,916,375,000, a loss of deposits in New York city of about \$1,400,000,000.

The reason this has occurred in large measure is because the banks, in demanding deflation or payment of their own bills receivable (bills payable of their customers), has resulted in their customers using their own deposits and the deposits of other customers for the liquidation of these bills. As the bills receivable go down the deposits go down.

It would be a wiser policy for the country for the banks

to extend credits to individual customers engaged in legitimate production and in legitimate distribution.

In my opinion, it is the duty of the Federal Reserve Board to immediately lower the rates of interest on all of their outstanding loans and to make new loans where required for actual production or for legitimate distribution. They are now taxing the commerce of the country in an unfavorable way, and it does not suffice that their purposes are good.

They should expand the credits of the Federal Reserve Banks as permitted by the Federal Reserve Bank Act to the extent that actual production may require, and in this way check the tendency to depression and stop the alarm which is causing men to slow up in producing the things the world requires. Many men are stopping production because of the fears excited by this policy of deflation. Deflation is justified when credits are used unduly for speculative purposes or for hoarding, but denying credit for legitimate production and distribution is harmful to the country, and cannot be justified.

To increase the purchasing power of the dollar it is better to stimulate production and increase commodities, while withdrawing credits and making the dollar more difficult to obtain for mere speculation or hoarding.

Deflation which results in stopping the industrial activities of the country is economically and financially unsound, and will result in social disorder, as well as in commercial and financial losses.

The Boston circular, to which I have referred, is entirely unsound, and the impressions created by the Babson circular ought to be corrected.

Yours respectfully,

ROBERT L. OWEN.

### English Firms Aroused Over American Cancellations of Orders.

Manchester, November 11—[Special.]—Since a week ago the Manchester Chamber of Commerce has given further attention to the question which has arisen with regard to the attempts of American houses to cancel contracts with English firms, especially in textile goods. The American Consul in Manchester has written to Mr. E. F. Stockton, the president of the Chamber of Commerce, pointing out that the American Consular Service has facilities for dealing with trade misunderstandings between American and foreign firms, and he has offered his services in connection with the present disputes. This letter has been considered by the directors of the Chamber, and since then Mr. Stockton has discussed the position of affairs with the American Consul. The latter has promised the co-operation of himself and the American Bureau of Foreign and Domestic Commerce in the efforts of the Manchester Chamber of Commerce to expose the alleged unjustifiable conduct of certain firms in the United States.

Mr. E. F. Stockton, the president of the Chamber of Commerce, and Mr. E. R. Streat, the secretary, have been in London this week in connection with this matter, and it is pretty certain that in any further action which is taken the Manchester Chamber of Commerce, the American Consul in Manchester and the American Chamber of Commerce in London will work hand in hand.

It may be said that several Manchester firms are very badly hit by the developments which have taken place, and as the goods which are not being taken up are fine yarn and cloth, the possible losses are very heavy, as during the past six months the depreciation in values has been over 50 per cent.

### New Booklet on Foreign Trade.

"Essentials of Trading With Latin America," a new foreign trade booklet designed to be of service to those interested in trade with the Southern countries, has just been issued by the Guaranty Trust Co. of New York. It deals briefly with the problems of language, finance and exchange, credits, transportation, consular requirements, insurance, methods of packing and marking, etc.

# Reviewing the Cost of the Present Cotton Crop

By W. W. MORRISON, New Orleans, La.

It will perhaps be illuminating to review, in connection with the following estimate of the cost of growing cotton, the different phases of public opinion that have made for or against a constructive study of the problem, and it will be especially instructive to take note of the changes that have taken place in the attitude of the public as the discussion has gone forward.

The public has always taken more or less interest in the cost of growing cotton, but for a long time it was rather negative in its general character. During recent years, however, particularly as far back as five years ago, it began to assume a more positive form, which has continued to steadily increase since that date.

It is really one feature of a general movement, promoted by the best there is in Southern thought and energies, which promises to reconstruct, through a radical but wholesome revolution, the entire fabric of the South's economic and industrial life. It can be said that the discussion of the cost of growing cotton which the movement has involved, while necessarily revolutionary measured by the orthodox standards of the past, has been, on the whole, substantially constructive.

The discussion in the earlier stages was made up largely of inconclusive generalities, unsupported assertions and opinions based upon mere heresy evidence. It was more or less burdened also with an intolerant kind of arrogance, an attitude which confident ignorance often assumes. Hence, these earlier stages of the discussion produced little of real value. Happily, this stage has passed. If one undertakes to discuss the cost of growing cotton now, the public demands an itemized accounting or detailed statement of some kind that readily lends itself to intelligent investigation. If such a statement is not forthcoming, the public very properly assumes that the individual is not sufficiently informed to entitle his views to serious consideration, and he is, therefore, consistently ignored.

Then, it is notorious that a very large section of the public for a long time were frankly unwilling to concede, in estimating the cost of growing cotton, the rights of the laborer to a decent living and the rights of his family to decent opportunities. This attitude was really inherited from the regime of slavery, and the opinion it reflected was for many years the conventional opinion as to the value of cotton. Like most purely conventional conclusions, it was reached, as a rule, without any due process of reasoning, and was, therefore, unreasonably obstinate, as such conclusions are.

It is interesting to note that when those estimates first came out allowing for the expense incident to providing the cotton laborer with a decent living and his family with decent opportunities, it so raised the cost of production above the conventional view that it invoked a perfect storm of criticism. The writer has examined a great volume of these criticisms, and not in a single instance did he find any item criticised except that of labor. The general character of these criticisms thus demonstrated in a most convincing way that those who held to the conventional view were wholly unwilling to allow the cotton laborer what was due him according to the recognized standards of justice and of sound public policy.

Happily, this attitude of a large element of the public has passed also. The rights of the laborer must be recognized now by all those who undertake to estimate the cost of growing cotton if they hope to secure for their claims a respectful hearing from the public. Of course, there are still exceptions to this change in the attitude of the public at the large speculative centers and among the spinners and their allies of the trade. However, none of these are now of any consequence in solving this most important question. It must be admitted that this change of attitude was not an act of pure volition prompted by a lively moral sense, but was, in fact, compelled by the independence which the cotton laborer has achieved. It was evident, in other words, that the laborer would abandon cotton completely if his labor in its production did not bring him the same comforts and opportunities that his labor

would bring in producing other products. As a matter of fact, that is just why he has been steadily abandoning the cotton fields in recent years, in face, too, of the higher prices which have prevailed.

It is one of the curious and unexplainable manifestations of the human mind, but it is nevertheless a fact, that thousands of people, some of whom were of unusual intelligence, were frankly unwilling to apply, in estimating the cost of growing cotton, the same business principles they themselves applied in estimating the cost of conducting every other kind of business. Business men, among them bankers and merchants of proven capacity, have time and again strenuously insisted in discussing the matter with the writer that products grown upon the farm, and whose consumption was made necessary by the production of cotton, could not be properly charged up to the cotton crops as part of the expense of its production.

This view, and the practice, too, has also been discredited and outlawed, as it should have been, as the discussion has gone forward. Except the element at the speculative and consuming centers referred to, it is generally recognized now that the only way to arrive at anything like an intelligent conclusion as to the cost of production is to charge the crop of cotton up with not only all the other expenses, but also with the value of all the products of the farm whose consumption was made necessary by its production, and also with the legitimate wages of the women and children who aided in its production, as well as the wages of all other labor. It is perhaps well to say, in this connection, that when half of the area is in cotton about 75 per cent of the products consumed is chargeable to cotton, as it requires about that much more labor to produce the cotton than it does the other products.

One of the very great obstacles to bringing the outside public to an intelligent understanding of this question has been the position taken by some of the large landowners. Many of these discredit the cost shown by estimates that strictly conform to sound business usage. They state that they are steadily making money at a much lower price. The fact is, this class of landowners view the matter of cost as to how it affects their interest as landlords and completely ignore the way it affects the interest of the laborer. This is a most important distinction that every student must make, and it is just as vital now that the consuming world should do the same. In every case investigated by the writer the profits of these landlords were clearly made possible only through the wretched privations of those who performed the manual labor in making the cotton. That was perfectly evident.

For a time much confusion grew out of the statement made up by those who itemized the account, and otherwise made an earnest effort to have their estimates conform to established business standards. The confusion was clearly due to the practice of mixing cotton up with all the other products of the farm and then trying to apportion the expenses and credits due to each product. This really involved the matter and left a confused impression in the public mind. It is generally recognized now that the simplest and most effective method is to treat cotton as a separate proposition, charging up every item of expense its production involves and giving credit for all the revenue it produces. Then make the showing of debits and credits in the form of a simple itemized account, a form with which most everybody is perfectly familiar.

This plan has been used in the estimate given in this review. It has been sought to show the average cost, taking the belt as a whole, it being obvious that only such a showing would be of any practical value. In this connection the claim is often made that the factors which enter into the cost vary so one cannot arrive at a conclusion of any practical value. It is notable that this is the claim of those whose leanings are most always towards lower prices and who are, therefore, sympathetic with the lower cost view of production. While variations in soil, in climatic conditions and in individual initiative may prevent one from arriving at the cost of producing cotton with the same accuracy that you can arrive at the cost of turning the raw cotton into cloth, yet you can approximate the general average with sufficient

accuracy to be a dependable guide in marketing the crops, certainly sufficiently near to prevent selling the crops at a sacrifice. This is made obvious by the fact that the expense of some of the larger business undertakings, especially that of outside construction, cannot be approximated any nearer, on account of uncertainties of climatic and labor conditions, than the expense in growing cotton, yet such an approximation has proven adequate and necessary also to their successful management.

It is perhaps well to say that the writer has had many years of practical experience in growing cotton, and that the items in the estimate below are generally concurred in by all of those with whom he has discussed the matter who have had a like experience. The figures below are based upon a 20-acre cotton farm. It will take all the time of one laborer and one plow animal to do the plowing required in cultivating such a farm and the outside work necessary to its general upkeep. While more can be cultivated in some parts of Texas and Oklahoma, less can be cultivated in a good part of the belt east of the Mississippi River. Twenty acres seem, therefore, a fair average. The estimate is based upon 160 pounds of lint per acre, that being about the average of the last five years:

#### ESTIMATED COST OF COTTON CROP, 1920.

Rent, 20 acres of land, at \$10 per acre.....	\$200.00
Rent, one plow animal, one year.....	65.00
Feed one plow animal, one year.....	282.00
Ginning 9600 pounds seed cotton, 30 cents per hundred.....	28.80
Deterioration of farm implements.....	20.00
Labor, one man, one year, \$80 per month.....	960.00
Extra labor, hoeing over crop 3 times, 75 days, \$2.75 per day.....	206.25
Picking 9600 pounds seed cotton, \$2 per hundred.....	192.00
Fertilizers.....	33.00
Planting seed.....	10.00
Gross expense.....	\$1,997.05
Less 3½ tons seed at \$60 per ton.....	192.00
Total.....	\$1,805.05

20 acres, 160 pounds, 3200 pounds of lint, net expense, \$1,805.05;  
cost 56.47 cents.

It is interesting to note that, on this basis, a yield of 200 pounds would cost 45.36 cents; a yield of 250 pounds, 36.43 cents, and a yield of 300 pounds would cost 30.50 cents.

It is hardly necessary to discuss the items of the estimate in detail. They are, in each instance, based upon the average of reports made up in July last by responsible business men, and cover every part of the cotton-growing area. For instance, rent was based on what was shown to be the average price of land. The price of cottonseed was approximated; of course, should the price for seed be above or below the basis of calculation, the average cost would be affected accordingly. Fertilizers cost on an average of about \$100 for 20 acres. However, only one-third of this amount is charged, as fertilizers are used in only one-third of the cotton-producing section. Since this report was made up, July 15, it is said that the oil mills are only offering \$20 per ton for seed in Southern Texas.

The Government estimated the average cost of the crop grown in 1918 to be 25½ cents per pound, based on an average yield of 225 pounds to the acre. Based, however, on 160 pounds, the actual average for the last five years, it figures 35½ cents as the actual average cost for the crop in 1918. The records on which this estimate is based show that the advance in the items listed from July, 1918, to July, 1920, was 51.63 per cent. This figures the cost for 1920 as 53.83 cents per pound, based upon the Government's findings for 1918, or 2.64 of a cent per pound under the estimate given above. Since it was reached through an entirely different method, it confirms, the writer takes it, the approximate correctness of the estimate made herewith for 1920. Certainly, the approximation has a significance which those who are growing the cotton can hardly afford to ignore.

The writer challenges those who are disposed to criticize to show in what essential particular the estimate is not correct. He insists, however, that the critics must do this through an itemized accounting that readily lends itself to intelligent discussion and investigation. It is, perhaps, proper for the writer to say that he has no particular love for controversies, but a rather extended experience has shown him that this is the best method to get rid of unprofitable generalities, mere assertions, and to get the discussion of this most important question on a basis that will be of some real value to the public.

## Plans for Warehousing and Marketing Cotton.

Kingsville, Tex., November 17—[Special.]—According to Fred Roberts, president of the United Cotton Growers' Association of America, the first of a large number of concrete warehouses for the storage of cotton by the new organization will be erected here. He said that the work of constructing the building will be started as soon as the architect's plans can be submitted to and approved by the board of governors of the association, whose purpose is to promote the building of concrete warehouses in all parts of the cotton-producing territory of Southern States. It is expected that by the time next season's crop is harvested there will be a large number of these warehouses ready for use. The warehousing of cotton is regarded as an essential feature to the systematic marketing of the staple, and it is expected that the organization will be of sufficient strength soon to be of material benefit in marketing the crop.

It is the special purpose of the association to rid the South of the low-grade cotton which has served to depress the price of the better grades. It is said that Germany is in need of cotton, but cannot pay cash nor even pay the transportation charges to Europe. It is proposed, therefore, to pool the cotton and then send a representative to Germany to trade the cotton for anything that Germany has which can be disposed of for cash in this country or any other. Mr. Roberts explained that it is proposed to follow the plan of a large locomotive works in America, which is trading locomotives for dyestuffs.

If a representative of the association cannot make a trade for products of Germany, it may be decided to sell the cotton to Germany on credit and accept any evidence of indebtedness on it that Germany can reasonably be expected to pay later on.

"It is believed that the matter is of vast importance to the banks and to all interests which are concerned in the cotton movement," Mr. Roberts said. "Banks have many hundreds of thousands of dollars loaned on cotton at the present time. Once America is freed from all the low-grade cotton, most of which has been held over from the 1919 crop, the amount of cotton left in America will not be more than is needed for domestic consumption, and the value of this cotton will be much enhanced. Since this higher-grade cotton is the basis of much of the security for the loans made by the banks, it will be of vast importance to the banks to have the low-grade cotton shipped out of the country."

## West Virginia's Largest Tobacco Crop.

Huntington, W. Va., November 10—[Special.]—Tobacco is coming more and more to be a staple crop in Southern West Virginia, and the 1920 yield of 11,426,000 pounds is the largest in the history of the State. The 1920 market will be opened in Huntington early in December, Huntington having one of the largest marketing places in the world for burley leaf. Cigarette and plug manufacturers are expected to have many representatives present when the buying begins. Offerings will include cigarette filler and plug wrappers and filler. It is rather difficult to gauge prices, but it is generally believed there will be a slump as compared with last year owing to the large crop and general conditions throughout the country. However, losses sustained by lower prices will be largely offset by the quantity produced. Farmers and warehousemen are generally agreed that opening prices will range from \$15 to \$20.

## Increase of Per Capita Wealth in North Carolina.

Raleigh, N. C., November 13—[Special.]—The per capita true wealth of North Carolina is now \$1235, against \$794 in 1912. The increase is 55 per cent. It is the result of the new revaluation provision, which the people of the State ratified by an enormous majority as a constitutional amendment at the recent election. But this 55 per cent increase in taxables is far behind the 200 to 300 per cent increase in the war-time values of town and rural real estate and commodities of all sorts. The properties are now on the tax books at their real value, \$3,000,000,000, and not at their inflated value, \$5,000,000,000. The per capita values range from \$2907 in Durham county to \$560 in Macon. Under the new tax amendments to the State Constitution it may never again be necessary to levy a general property tax for State purposes.



# The Meaning of Deflation

POVERTY AND UNEMPLOYMENT ALWAYS FOLLOW IN ITS WAKE.

By A. P. PANTON, King Hill, Idaho.

Prior to the passage of the Federal Reserve Act its advocates promised that it would endow this nation with a "New Financial Freedom" by furnishing every part of the land with such an adequate circulation of actual money that we would thereafter be immune from monetary stringency, not to mention panics.

The idea of an adequate circulation has always been a nightmare to the master banks, which therefore opposed the measure until it was fixed to suit them, when they withdrew their opposition. Instead of expanding the circulation the elimination of money has progressed so far that the per capita circulation is less than during the extreme depression of the nineties. The cash holdings of the country banks have been reduced to insignificance. The published statement of one bank in this country gives its cash on hand as \$4370, against \$251,000 deposits. Another has \$11,000 cash to \$500,000 deposits subject to check. Another smothers the cash item, making it "Cash in vault and due from other banks, \$32,250," to about \$700,000 deposits, including \$133,000 time deposits. All this looks more like a gamble on a strand of cobweb than on a shoestring.

With such insignificant cash holdings there can be mighty little money in circulation in this most productive farming region. It is certain that if all cash in the banks were added to that in circulation it wouldn't make \$5 per capita for the community, though the official statements from Washington repeat the absurdity of over \$50 per capita "in actual circulation."

As a result from this extreme dearth of money, merchants have difficulty in procuring change for the checks that constitute an inferior "life blood of business." In restaurants and barber shops the blank checks of local banks are in sight, owing to the foregone conclusion that many customers lack even 50 cents in money to pay for a meal or haircut. Most checks are drawn for \$1 or more, so the customer gets some change, and many of the checks prove worthless.

The ordered contraction of credit showed its baneful effects by July 1, and was aggravated by the suspension of Federal Farm Loans, of which \$300,000 had been approved here just before the suit of the Associated Mortgage Banks hung them up. All this proved disastrous to the most essential industry of farming, just when an expansion of money and credit was urgently needed to finance the harvesting and moving of crops. Instead of the promised financial freedom and immunity from stringency, the contrary prevailed.

In the American Magazine for August Mr. Clarence W. Barron, reputed the greatest of financial publishers, gave the first straightforward and obviously honest statement of the case that I have seen from anyone of his class; substantially as follows:

**"There is no shadow of reasons why the business of this great continent should not enjoy continuous, booming prosperity."**

That, of course, is the simple truth. Given a country of such vast supremacy in its resources, its people, its transportation system, and its geographical position, its natural condition is continuous prosperity. Any other is artificial, due to a grossly defective and inadequate monetary system and vicious maladministration of the national finances.

Mr. Barron said further that "to talk of contraction at this time is a crime," when the Federal Reserve Banks could expand credits by two billion dollars, and still have larger percentage reserves than are held by England, France, or any other leading nation.

No doubt, even before this pronouncement, if any business man was asked whether we would place more reliance upon the opinion of Mr. Barron or of a college economist, he would place that of Mr. Barron far above that of all college economists. But the master banks favor the college theorists, whose arguments for "deflation" during the first half of this year, especially those of Prof. E. W. Kemmerer of Princeton University, were published by the American Economic Association and the Banking Statistics Corporation of New York.

It is almost certain that no business men nor business organization in the United States ever asked for or wished for a con-

traction of money or of credit, but they seem to take it lying down when it is inflicted upon them on the advice of college economists given under direction of the master banks.

Professor Kemmerer evidently has a broader knowledge of the subject than most of his class, for while advocating contraction he expressed belief that it would entail a prolonged period of stagnation and hard times. Knowing that an incomprehensible aggregate of social misery would inevitably ensue, with evident reluctance he held contraction necessary to force down prices and maintain a 40 per cent gold reserve.

For whose benefit? Mr. Arthur Kitson, the most eminent and practical economist of England, himself a large employer of labor, writing to me last spring of the scheme of the London bankers to contract currency and credit, said:

"There is no question but that the money-lending sharks of all nations are working overtime in order to force the world's governments to bring back the pre-war monetary standards. Of course, this will double the present indebtedness of all nations, and incidentally double the wealth of the money-lenders who are the holders of bonds, etc."

He proceeded to discuss the causes of the "Hungry Forties" when people were dying of starvation, business was stagnated and riots prevalent, these awful conditions caused directly by adoption of the gold standard and destruction of the paper money that financed the Napoleonic wars and maintained great prosperity so long as it was allowed to circulate, and continued:

"We are today menaced in the same way. The country is overburdened with debt; we are paying high rates for money; in spite of the so-called plentiful supply the banks are beginning to refuse accommodation and business is naturally suffering. It only wants a further tightening of the screws which the Treasury officials are proposing to bring this country to a state of Bolshevism. Labor conditions are very critical, and there is general unrest, and if manufacturers find it necessary to either cut down wages or close their works, the unemployed very soon organize themselves into armies, and then look out for a revolution."

We have the same conditions in America. The bomb outrage in New York was an object lesson. The atmosphere is very different from that of the nineties, when Coxie's army was regarded as a joke. A continued depression will render millions of ordinarily good citizens receptive to Bolshevik propaganda. The placing of extra guards and detectives about New York's financial institutions and the abode of some prominent citizens, evinces some suspicion of what is in the air, but indifference to the cause thereof.

On October 18 the Comptroller of the Currency issued a bulletin to all the banks and to the press giving startling information about the vast credits extended by the Federal Reserve banks to the New York banks at less than 6 per cent, and reloaned largely at 15 per cent to 30 per cent. He expressed a strong desire to impart this information to the public, but I have seen no word of it in the newspapers, which are apparently closed to all but "safe and sane" financial news. It is not expedient to inform the public of the large volume of national credit available to the virtuous plungers who pay more for its use than could those engaged in the most essential of industries, the production of food. In further proof of this iniquity, a member of the Federal Reserve Board addressed the bankers of West Virginia in September, showing them by official figures that there were then larger volumes of credit out than at any previous times. The speech was published in pamphlet form and contained in italics the ominous statement: "There is no credit to enable farmers to hold their crops."

Of course, it would be highly improper to deprive the banks of the fancy profits from stock gamblers by diverting the credit to essential business and industry.

During October last Mr. Kitson wrote me of further developments from contraction in England, saying in part:

"There is no doubt that the international Jewish financiers are playing a world-wide game with a view of securing the bulk of the wealth of the world under their control. Here the results are

proving disastrous, works are closing, thousands of men are being thrown out of employment and other firms are working half time, and there is general depression."

In a former letter about contraction, he said:

"After every great war, such as the American Civil War and the Napoleonic Wars, the Governments of those times stupidly destroyed large volumes of their currency in order to reduce prices and raise the purchasing power of money. The result in every case has been the same, namely, stagnation of business, industrial depression, unemployment and social misery, brought about by the very act of lowering prices and destroying money. If the money had been allowed to remain in circulation the demand which it represents for commodities would have created a great impetus, and would have encouraged production, so that everybody would have been well employed and wealth would have increased. The result of this would have been that prices would have gradually fallen, due, not to the scarcity of money, but to the increase in the supply of wealth. *This is the proper remedy for inflation.* Of course the financiers prefer the other method, namely: the destruction of the paper money, because it immediately enhances the value of their claims and credit, and gives them a perpetual grip over the whole field of production."

With the outbreak of the late war, the most conservative Governments in Europe realized the immediate and urgent need of large volumes of small money, both paper and coin, even the neutrals promptly issuing huge sums in paper money and following with all possible coinage. All of them knew that nothing but an adequate circulation of actual money could develop the full efficiency of the people, for working or fighting or both. Nobody has yet explained why it is not for the national welfare to maintain the full efficiency of the people during peace as well as in time of war. It is even more important, for in addition to the annual economic loss of billions of dollars through an army of unemployed, such an army now is certain to cause more serious internal disaster than would come from a great war with a foreign power.

The Literary Digest of this week quotes many authorities to show that the increasing unemployment in this country results from the commendable process of weeding out the less efficient majority of employes while retaining the more efficient minority. There seems complete indifference as to what will become of the discharged majority, and what they will do to the nation when they have time to organize and formulate their plans of reprisal. It is remarkable that this wholesale inefficiency is of such recent discovery.

I do not expect that any monetary reform will be affected during my time, the only hope being the success of the British Banking Reform League, which may provide an object lesson for the world. There is no indication that any member of Congress or of the British Parliament has any knowledge of monetary science, though fifty years ago a considerable percentage of both knew something of it. Senators Teller and Jones were the last of the United States legislators who understood money and foreign exchange.

Here the Secretary of Treasury is either a banker, placed in the office by the American Bankers' Association to play their game, or else a political accident, ignorant of money, taking his advice from the bankers. So with the Director of the Mint and other officials who are entrusted with the financial administration. A banker is the last man who should be allowed to direct or to advise the Treasury officials. His whole education and religion is toward limiting the use of money to the most meagre possible circulation, loading every transaction with interest, and maintaining absolute power over the people and their interests. His line of thought being always against the welfare of the people, may explain why no banker is allowed on the directorate of the Bank of England, nor as governor, nor in any capacity except as an employe of the bank. The intent at the beginning was all right, as with the Federal Reserve Act, but means have been found to nullify the apparent protection.

It must be clear to you that the first duty of a Government is to provide its people with an adequate circulation of small money. Lacking that, all else tending toward prosperity comes to nothing. Each college economist holds as the ideal condition such a perfection of banking that the use of money will be totally eliminated. Professor Fisher, whose political speeches did him great credit, has written and published nothing but the most absolute piffle as

to money. He proposed recoinage of the silver stock with fluctuations of the bullion price. Also to regulate the price of gold by a system of bookkeeping, whereby index numbers would be used to estimate the value of gold, and monthly announcements be made of the number of grains constituting a dollar, as if one in 50,000 cared whether there are 5 or 50 grains in a dollar! In his work on "Money and Prices," he states positively that no expansion or contraction of money and credit can alter the volume of business by a fraction of 1 per cent.

Kemmerer of Princeton, wrote a book on "Monetary Reforms" in India, Russia, etc. That in India caused 12,000,000 of the 16,000,000 deaths by starvation in the two famines following the closing of the Indian mints to silver, and has played hob with world-wide finance ever since. Baron Witte, establishing the gold standard in Russia, wiped out the paper currency of the people, so in 1897 500,000 of them starved to death while 80,000,000 poods of wheat was exported. Deprived of money they couldn't buy food.

### An Episode of Deflation.

[From the Bache Review.]

The dangers of too rapid deflation were illustrated in the conditions in England in 1815-20, after the Napoleonic wars. The years immediately following these wars were marked by feverish speculation, with the result that capital was embarked in the production of many commodities far in excess of requirements. The market in many important products was artificially controlled by speculators. At that time "the developments in the field of finance, the centralization of resources, the growth of the credit system and the advancement of economic science, were only in their infancy." Consequently, when the policy of deflation was prematurely decided on and a general restriction of credit and currency was promptly inaugurated, an industrial slump of large proportions took place. The deflation process was carried on so rapidly that by 1817 the Bank of England was able to resume partially, payments in specie, and by 1820 had completely renewed cash payments. The result upon trade was drastic.

Not longer ago than September, the London Statist called attention to this episode in history. It said: "It may seem curious to bring forward this point, seeing that inflation is an undesirable development, but we would point out that the inflation which has been going on since the armistice has been necessary to ward off a greater evil. While inflation is in progress trade prospers, and did we commence a vigorous policy of deflation now the results would be disastrous.

"Here, indeed, lies the chief danger. We are very far from decrying the necessity for deflation; we merely point out that the time for such a dangerous process has not yet arrived. It must not be attempted until conditions of production have become more stable and until Government expenditure, and with it taxation, has been greatly reduced, and the money thus liberated diverted to productive purposes. It may be recalled that the panic of 1825 was precipitated by a sudden and severe restriction of credit and currency on the part of banks. Even in America, at the present day, great hardship is caused to industry by an incomparably more sober and enlightened deflation campaign."

It will thus be noted that in England the sentiment for active measures of deflation is in favor of postponing such measures until taxation has been greatly reduced and money thus liberated. It is reasonable to consider whether this would not have been a good program for us.

### \$100,000 School for Rosedale, Miss.

Memphis, Tenn., November 22—[Special.]—A consolidated school, serving a wide district about Rosedale, Miss., one of the rich little cities in the Mississippi Delta, is to be erected before next spring at a cost of \$100,000. Plans have been approved and bids are being received. The building will be of mission type, of brick and hollow tile, and modern in every respect as to equipment. It is one of a large number of exceptionally fine consolidated schools of which the delta section of Mississippi now boasts.

### 4500 Tons of Sugar Mill Machinery For Cuba.

Mobile, Ala., November 22—[Special.]—During the past few weeks more than 4500 tons of sugar mill machinery has been shipped through this port to Cuba. The greater part of this equipment came from St. Louis, but a portion was manufactured in Birmingham. Two steamers are now loading more than 1000 tons of such machinery, and three vessels have sailed with 3350 tons on them.

The export of sugar mill machinery through this port has been increasing steadily recently, and with a revival of general business activity in Cuba, which is expected in the near future, an even greater increase is looked for.

### New Tobacco Rehandling Plant in Operation.

Danville, Va., November 16—[Special.]—The accompanying illustration shows the new Liggett & Myers tobacco rehandling plant, which has just been completed and is now in operation. Tobacco men who have examined the plant recognize it as the most modern of tobacco factories, and are interested in several innovations and time-saving devices. Its airiness and unusually good lighting arrangements will make possible the immediate detection of faulty grading. The building was put up by John Pettyjohn of Lynchburg, and cost over \$250,000. It is 330 feet long, 90 feet wide and has two stories of 17 feet each and unusually large windows.

The plant will use 250 colored laborers, and will have a capacity of 150,000 pounds of tobacco each day and storage-room for 40,000 hogsheads. The tobacco is brought on drays or in hogsheads to the loading station, opened and removed on elevators to the second story, where two long drying machines have been installed. These machines run half the length of the building. The tobacco is placed on trays attached to an endless chain, and slowly moves through a high, dry temperature, which removes the moisture and dries the product. The final process finds the leaf passing through a compartment where live steam is injected, so that the tobacco once more becomes pliable and emerges from the machine in condition to be packed in hogsheads. This is the only operation in the factory, which, however, is equipped with special devices for compressing the tobacco into large hogsheads weighing 1000 pounds when filled.

In order to handle more expeditiously offerings from other markets, a spur track has been built to the main line of the Southern Railway.

The building is fireproof, of reinforced steel and concrete. It is equipped with its own sprinkler system and power plant which adjoins. The reduction in the fire insurance rate on this building is so considerable as to materially assist in meeting the interest on the investment.

The company planned a more ambitious plant, but at the time they were about to build the cost of material and labor soared so that revisions had to be made. It is virtually certain, however, that next spring will see another section added to the rehandling plant and the original plans will be carried out in more leisurely fashion.

### Capacity of Chesapeake Iron Works Now 1000 Tons Per Month.

Completion of the new addition to the Chesapeake Iron Works, builder of steel structures, bridges and electric traveling cranes, Baltimore, Md., gives a capacity of about 1000 tons output a month, or 12,000 tons output per year. The building is equipped throughout with latest and most efficient material-handling devices.

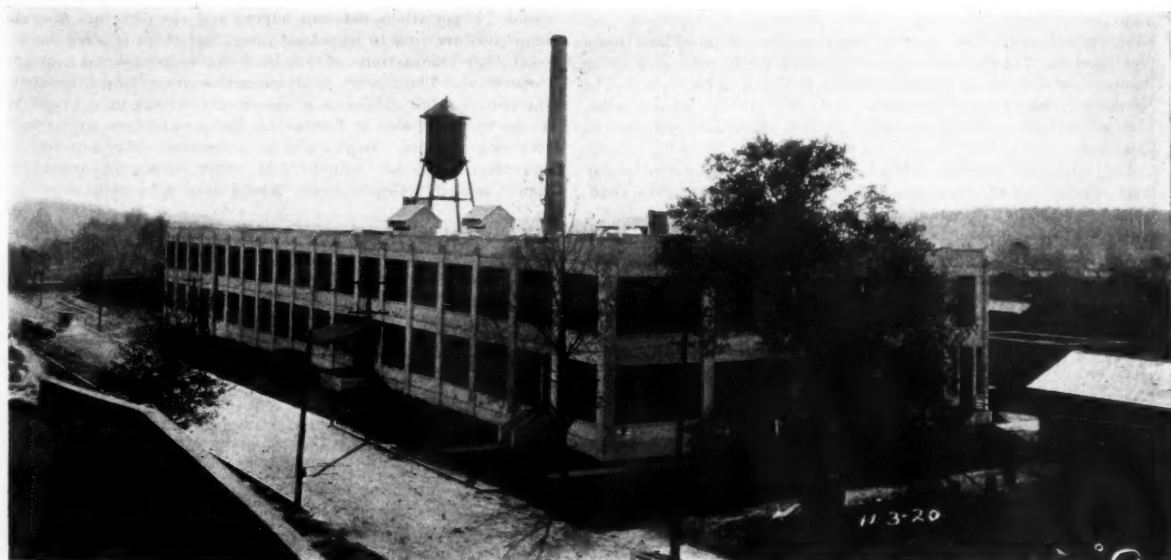
The accompanying illustration shows the interior of the new structural shop of the company's plant at Westport, with the assembling shop in the background. The building is 210 feet



INTERIOR OF NEW STRUCTURAL STEEL SHOP CHESAPEAKE IRON WORKS.

long by 60 feet wide, and about 35 feet high. Operating throughout its entire length is a Chesapeake electric traveling crane of 20 tons capacity and 58-foot span. In addition, two one-ton 20-foot span Chesapeake gantry cranes have been installed and are utilized to handle "bull riveters."

The two lattice girders shown in the picture in the course of completion are for a Chesapeake electric traveling crane of 5 tons capacity and 110-foot span. The weight of each of these girders is about 12½ tons, and each one is 7 feet in height by 5½ feet wide.



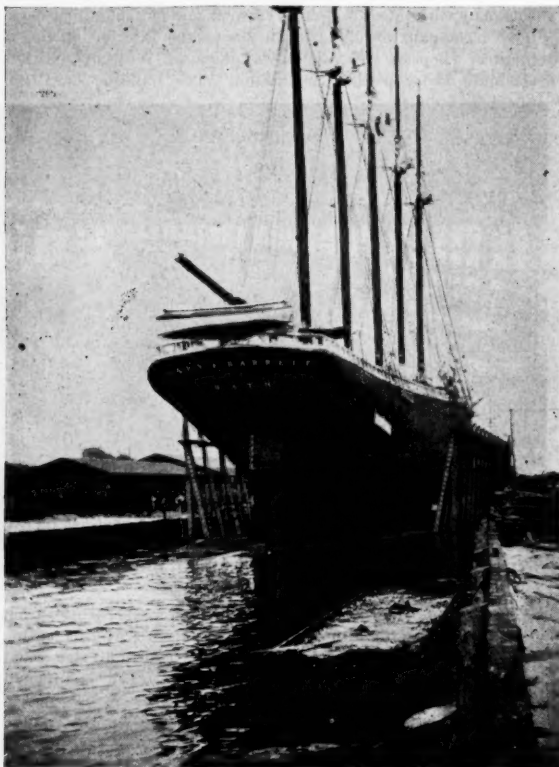
NEW RELOADING PLANT OF LIGGETT & MYERS TOBACCO CO., DANVILLE, VA.



### Newport News Shipyard Building Concrete Barges.

Norfolk, Va., November 19—[Special.]—The Southern Shipyard Corp., whose plant is located at the Municipal Boat Harbor and covers a tract of about 20 acres at Newport, News, Va., is at work fulfilling a contract for six reinforced concrete oil barges for the War Department Transportation Service. The barges are to be 125 feet long, 28 feet wide and 12 feet molded depth. Two shipways are now in use.

This corporation established its plant at a cost of about \$700,000, and has devoted practically all of its attention to ship repair work. The contract for the barges is the first new construction



VESSEL ON 3000-TON MARINE RAILWAY AT NEWPORT NEWS YARD.

work undertaken. The plant is situated for the most part upon reclaimed land in the development of the boat harbor, and has a frontage on Hampton Roads of 1000 feet and 2000 feet on the Newport News harbor. Besides a pier 500 feet long, 40 feet wide, with a depth of water alongside of 25 feet, there are 4000 feet of bulkheads.

The company recently placed in operation an exceptionally large marine railway having a lifting capacity of 3000 tons deadweight. It is of the Crandall type, and has four tracks and a cradle 60 feet wide and 288 feet over all.

The plant is equipped to do repair work upon the largest type of vessels, and the buildings are of steel upon concrete foundations. Acetylene and electric welding is also done.

### 1921 Meeting of Cotton Manufacturers in Philadelphia.

Charlotte, N. C., November 17—[Special.]—The members of the board of governors of the American Cotton Manufacturers' Association here selected Philadelphia as the meeting-place for the 1921 convention of the association. C. E. Hutchinson of Mt. Holly, N. C., chairman of the board, presided over the meeting today. The board took no action looking to recommendations to the industry as a whole, the canvass of the general situation being confidential. There was some discussion, however, of the curtailment of wages and production, it being found that nearly all the mills are putting this policy into effect.

### Thousands of Acres to Be Reclaimed in Mississippi Valley.

Memphis, Tenn., November 22—[Special.]—Owners of lands in the undeveloped portions of the lower Mississippi Valley are planning development steadily in face of adverse financial and other conditions, and many new and big projects will be ready for the construction people by spring. The total of the acreage to be reclaimed and made ready for farming, or protected against standing surface water, will run into thousands of acres.

An idea of the progress being made in this direction might be gained from work under way in Chicot county, Arkansas, in the rich alluvial or delta lands. Six thousand acres are being reclaimed by the Bayou Macon Drainage District No. 3, construction work in which will be finished by June 1, 1921. The improvement will cost \$60,000, but it will add far more than that to the value of farm lands in the district.

Grand Lake Drainage District, in the same county, embraces 11,750 acres, and contracts for 20 miles of main and lateral ditches will be let before December 1. The work is especially planned to give outlet for tile drainage on the farms. Seventy-five per cent of the district is clear farm land, and a majority of the landowners expect to begin tile drainage when the outlets are ready.

The Eudora-Western Drainage District is the largest one of the three, and is just now being planned. It will embrace 123,000 acres of the richest alluvial or deposited lands in the county. The district will be ready to call for bids soon after the first of the year. Outlet and lateral drainage is being planned.

Recent Government statistics show that there are approximately 2,000,000 acres of the Mississippi Delta alone now in organized drainage districts. Land properly drained has enormous worth for all kinds of farming. In all, there are probably 300 districts in the lower Mississippi Valley, some of them with systems in operation. Aside from the great increase in value to the lands, the work is improving health conditions wonderfully and making way for very rapid development.

### Lancashire Textile Machinery for Foreign Countries.

Manchester, England, November 3—[Special.]—During the last week or two several representatives of European and Japanese textile interests have been in Lancashire for the purpose of purchasing cotton-spinning machinery. They have found makers very deeply engaged, and most firms have contracts on the books which will take three to four years to work off. Owing to the impossibility of obtaining quick delivery, attempts are being made to purchase outright Lancashire mills, the idea being to take out the machinery and ship it abroad, after which the building will be resold. Negotiations between buyers and the directors of certain companies are said to be taking place, but there is some doubt as to whether transactions of this kind can be considered a business proposition. The foreign representatives are chiefly interested in ring spindles, but this class of machinery is very hard to get hold of, the tendency even in Lancashire being to replace mule spindles with ring spindles. In pre-war days the basis of a new ring mill was about 30s. per spindle, but today, even for second-hand frames, probably £5 per spindle would have to be paid.

### New Steel Car Works Progressing.

Construction is progressing upon the additional buildings at the plant of the Chickasaw Shipbuilding & Car Co., Fairfield, Birmingham, Ala., which will enable that corporation to build pressed-steel cars. From 15 to 25 complete cars will be the daily capacity, and all the machinery has been ordered, with a view to its installation for operation early in 1921. The additional plant buildings include a foundry, a paint shop and an erecting shed, all constructed of steel manufactured in the mills at Fairfield. The company's car plant and its plate mills will be operated in unison, so that the plate mill will be manufacturing steel for the sides and underpinning of steel freight cars when it is not manufacturing plates for ships. Several hundred skilled mechanics will be added to the company's payroll when this car department is ready for operation. Cars daily from the Chickasaw plant are expected to prove an important factor in moving the manufactured products of the Birmingham district.

# The Economic Conditions of French Agriculture

By EDWIN C. ECKEL.  
VII.

In the third article of this series, where French living costs were discussed solely from the standpoint of an American tourist who could buy francs at fifteen to the dollar, it was suggested that these same costs might be differently regarded by the French citizen, who was tempted to consider the franc as a fixed unit of value.

Now, in following out this line of investigation, we come finally to the conclusion that in France, as in every other country whose industry and finance have been influenced by the World War, the effects have been different on different classes of its citizens. In each country we find that certain classes have gained, so that their actual income today brings them more buying power, even at increased prices. On the other hand, certain other classes have just as definitely lost by the war.

In dealing with French agriculture, and with the peasant proprietor, who is its mainstay, we are in touch with one of the great classes that has definitely improved its financial position as a result of the war. And this is very fortunate, for France is, after all, pre-eminently an agricultural country, and the financial success of her peasantry means a great deal, both socially and politically.

## The Importance of Agriculture.

We can, fortunately, get a pretty definite idea of the relative importance of agriculture in France, as compared to other occupations, from several different, though related, standpoints.

First, as to area occupied. Of the 133,000,000 acres which make up the extent of continental France, almost exactly 100,000,000 were, in the year before the war, strictly agricultural lands. Of this, some 60,000,000 acres were actually under crop in that year, while 40,000,000 were fallow or in pasture. It may be noted in passing that of the non-agricultural acreage of France, 25,000,000 acres are accounted for by forests, while a little less than 10,000,000 are at present useless, being in swamp, barren or sand plains.

Second, as to population employed. At the date of the last pre-war census the total population of France was reported as roughly 39,000,000. Of this total, practically 21,000,000 were reported as working or productive classes. Now, of the total productive labor, almost 9,000,000 were engaged in agriculture and forestry. On this basis, therefore, 42½ per cent of the working population of France were engaged in this line of activity. This compares, it may be noted, with some 29 per cent engaged in manufacturing industries.

Third, as to value of product. Here we have to deal with figures which are more variable from year to year and subject to a larger chance of personal error. One estimate, for the years immediately before the war, placed the total value of agricultural product at 12,000,000,000 of francs, as compared with 15,000,000,000 derived from other sources. Later in this article we can get some idea of the relative importance of the different crops and products in the make-up of this agricultural total. At present we can pass on to another phase of the subject which is of great economic and social importance to France.

Edwin C. Eckel, recently Major of Engineers, United States Army, one of the most widely-known engineers and geologists in this country, identified for many years with the United States Geological Survey and afterwards representing leading business interests in the investigation and development of iron ore and cement properties, was appointed Captain of Engineers on January 23, 1917, and detailed on the staff of the American Expeditionary Force in France. While in France Mr. Eckel was in close touch with the whole-war situation. After returning to America he wrote a book entitled "Coal, Iron and War: A Study in Industrialism, Past and Future," which has attracted very wide attention in Europe and in this country.

Mr. Eckel recently returned to Europe for investigation of important matters for clients, and the MANUFACTURERS RECORD has been able to arrange with him for a series of important articles on the economic and political conditions of Europe as seen from the standpoint of a trained expert who, by reason of peculiar opportunities, is enabled to get into the closest touch with the foremost business men and Government officials in the Allied countries.

Mr. Eckel will continue from time to time, as he has the opportunity, a series of articles on European conditions. We believe that no other American who has visited Europe will be better able to size up the whole situation from the economic and political standpoint.—Editor MANUFACTURERS RECORD.

## The Extent of Land Ownership.

Agriculture is not only the most important occupation in France, but it is also the most widely diffused, so far as actual ownership is concerned. Any very exact figures on this point are open to question because of the purely statistical difficulties which are involved in considering the matter. But for our present purposes it is safe to assume that at least half the families of France are owners of land; the actual percentage may be even higher than this, but in any case it compares very strikingly with the conditions in Great Britain, for example, where landowners make up less than 10 per cent of the total population.

This wide diffusion of land ownership in a small country implies, of course, that the average holding is also small. It is estimated, for example, that there are some 5,500,000 separate farms or agricultural properties in France, so that the average farm would be about 20 acres. But in this case, since a few large holdings do exist, a merely arithmetical average is misleading, as usual. My own impression is that if we exclude the 10 per cent of largest ownerships, the remaining 5,000,000 farm properties would not average much, if anything, above 10 acres. That is about as fair an estimate as we can reach, and it will do very well for our present purpose.

It is frequently assumed that peasant proprietorship in France dates back only to the French Revolution, but, in fact, the condition was of far earlier origin. It is true that in 1789 there were vast estates owned by the Church and the nobility. It is also true that the average French peasant of that date was miserably poor. But that was a general condition, due to the fact that the whole country was poor, crushed down under the taxation necessitated by a series of long, unsuccessful and expensive wars. And—to get a clearer background—remember that the Scotch coal miner of the same period was a miserable serf, chained legally to the property on which he was born until the time of his death.

What did happen during the early days of the French Revolution was that the great estates were confiscated, cut up and sold to anyone who chose to buy. Since they could be paid for in otherwise worthless paper money, the wise people of the time bought land. And the French peasant has never been one of the foolish of this earth.

## Small Ownership and Small Tracts.

Left to itself, there would not necessarily have resulted from this condition any remarkable number of small land holdings. But under the Empire, when the Civil Code was formulated, a very curiously effective impetus was given in that direction. This results from the restrictions on the power of a French citizen to freely dispose of his property by will. The regulations as to succession are so strict and so minute that any serious irregularity is impossible. Practically the result is that real property is equally divided at death by heirs, according to degree of relationship. And since the French peasant is chronically land-hungry, each child insists on an actual physical division of the farm land, so that the net result is a very widely diffused ownership in a large number of very small tracts.

We have said, for example, that the average French farmer may own 10 acres. But if so, it is entirely likely that this total will be made up of from three to ten small pieces of land, some of them a mile or two from the next of his lots. It must be recalled that in the average French rural community the farmer does not live on or even near his farm land; he lives in a small village and his land is located somewhere between that and the next village, which may be from two to ten miles away. This scattering of the holdings has economic effects that are entirely bad.

## The Economies of Small Holdings.

So far as the economic and political effects are concerned, we must make a distinction between the two conditions which happen to exist simultaneously in France. A widely diffused land ownership, which necessarily results in a small average acreage owned, is one thing; the existence of this small farm, not as a single plot, but as a number of scattered tracts, is something entirely different.

From a purely economic standpoint, small ownerships are not

as efficient, other things being equal, as larger holdings, because the overhead charges are too great to give a low cost of production. But there are some counterbalancing advantages which must be kept in mind. First of all, the owner of a small farm in France puts more work on it per acre than the owner of a large tract; so that his results per acre are very good. Second, there is the political and social security afforded by the fact that over half of the population of the country are directly interested in the land and in the country itself. It is the sheer mass of the French peasantry which blocks all efforts at radicalism.

The weakest point, economically, about the system of very small farms cut up into little scattered tracts is, of course, the difficulty it puts in the way of using modern farming appliances and machinery. A tractor, for example, can hardly be an economic purchase unless 200 to 300 acres are open for its use. And, as we have seen, this implies that in the average French rural district at least 10 farmers would have to club together in order to supply the necessary acreage to make the purchase profitable.

These difficulties have, of course, been seen, and even before the war the Government had made it easier for the peasants to remedy the two principal defects of the system. On the one hand, arrangements were made by which local credit institutions would supply loans, at low interest rates, for the express purpose of concentrating the scattered tracts into small but solid blocks. On the other, it was made legally easier for a small group of farmers to associate for the express purpose of buying and utilizing farming machinery in common. These banking and legal reforms were put in force before the war; they have not yet had time to show their effects.

#### The Distribution of Crops.

It has already been noted that wheat is the main crop in France, and that as a wheat-growing nation that country ranked third, being led only by the United States and Russia. When we compare the production per acre, however, France ranks above ordinary years, in cereals of one sort or another.

Of the entire cultivated area, some 40 per cent of France is, in ordinary years, in cereals of one sort or another.

Of these, wheat accounts for some 16,000,000 acres and oats for 9,500,000. Rye ranks third among the cereals, with some 3,500,000 acreage.

In normal years, even before the war, continental France imported wheat. But practically half of the imports were from her own colonies, Algiers and Tunis, and while the wheat crop of North Africa is steadily increasing, the return of Alsace brings back an important cereal-producing area. In normal years after the war, therefore, we may expect to find that France will import little or no wheat from foreign countries. At present this is not true, for, as noted in an earlier article of this series, the acreage under wheat in 1920 amounts to only some 12,000,000, as compared with the pre-war average of 16,000,000.

Since 1914 the wages of French farm labor have more than tripled, and the peasant proprietor has made money on the high prices for farm products. The larger estates have not done so well, because of the prevailing labor scarcity, as have the smaller owners and the actual laborers. This condition exists, probably enough, in most of the agricultural regions of the world. The farmer and farm laborer have, on this world-wide rise in prices, gained on balance.

#### Urge Early Completion of Ohio River Canalization Project.

Paducah, Ky., November 19—[Special.]—With approximately two-thirds of the work of canalizing the Ohio river from Pittsburgh to Cairo completed, the Ohio Valley Improvement Association, at its annual convention here November 16 and 17, decided to send its Executive Committee to Washington, when Congress convenes in December, to urge upon the Rivers and Harbors Committee, the importance of getting work on Locks and Dams No. 52 and 53 at Smithland, Ky., and Mound City, Ill., under way in the spring, and to put the whole work on the Ohio under the continuing contract system or "by some equally effective action to give assurance of its completion within a reasonably certain time."

#### West Virginia Farms Show Big Decline in Number But Increase in Crop Value.

Charleston, W. Va., November 4—[Special.]—It seems hardly possible, yet in the decade between 1910 and 1920 there was a decrease of 9396 in the number of farms operated in West Virginia, or the difference between 96,685 and 87,289. While in many instances farms have been given up or abandoned, to a greater extent the reason for the large decrease is to be found in the industrial development of the State. That is, where the coal, oil and gas development has been the largest, the decrease in the number of farms has been the most noticeable. Take Kanawha county, rich in its coal, oil and gas resources, and in the 10-year period there was a decrease of nearly 900 in the number of farms.

By a peculiar coincidence, Nicholas county has today 1670 farms, just as it had 10 years ago. In 1910 Kanawha county had the greatest number of farms in the State—3807. It has since given way to Wayne, which today has 3058 farms. McDowell, a great coal-producing county in West Virginia, has only 799 farms as against 880 in 1910. One of the richest counties in the State from an agricultural standpoint is Jefferson, and yet it has only 900 farms, indicating that the farms in that county are unusually large. Putnam, though one of the smaller counties of the State, has 1955 farms.

Rapid strides have been made in the farming methods of West Virginia in the past 10 years, farmers having become better educated because of the large number of county agents scattered over the State, few counties being without one. Hence it may be safely assumed that the most potent factor in causing a decrease in the number of farms in West Virginia has been the industrial development of the State. Though there has been a heavy decrease in the farms operated as such, yet in the same period there has been a marked increase in the value of farm products, largely because farmers are securing better results.

#### Many Oil Concerns Forego Dividend Payments.

Oklahoma City, Okla., November 8—[Special.]—Reports from over the Mid-Continent district indicate that many oil concerns, both large and small, have been compelled during the last 60 days to forego the payment of dividends because of the financial situation. Some of them have paid stock dividends in lieu of cash. The reason is given that funds derived from production have been necessary to carry on drilling.

Oil operators find encouragement in the fact that there is no lessening of the demand for crude oil and refined products, which means that there is no danger of a reduction of prices. Other commodities have gone down, but oil prices remain steady. "You may influence a man driving a pleasure car to spend less money for clothes," says an oil man, "but you can't keep him from buying all the gasoline he wants to run that pleasure car."

Evidences are everywhere that the tight situation is soon to be relieved, oil men say. They point specifically to the fact that the National Exploration Co. of New York, headed by Percy Rockefeller, was the largest buyer recently of Osage leases, and that this and other big concerns have laid plans for big drilling campaigns.

#### Huge Steam Shovel for Coal Land Development.

Tulsa, Okla., November 18—[Special.]—One of the largest steam shovels ever built is being used in the development of a 400-acre tract estimated to contain 1,500,000 tons of coal adjacent to this city by the Leavall Coal Co. This company was recently organized by local business men, and plans call for furnishing coal not only to consumers in this city, but for shipment elsewhere. The project, it is believed, solves the fuel problem here for many years to come, and will result in big industrial expansion.

The capacity of the shovel is 7½ cubic yards; length of boom, 80 feet; length of dipper handle, 58 feet; length of revolving frame, 48 feet; approximate working weight, 672,000 pounds. This shovel was specially constructed for removing overburden from 15 to 40 feet in depth from horizontal coal veins, its average capacity being 4500 to 5000 cubic yards per nine hours. The shovel is so designed that it is possible to make one cut where an ordinary shovel is obliged to take from nine to twelve cuts with an equal number of adjustments.



## Big Developments in Pinehurst Section—The Great Golf Center of America Expanding.

Southern Pines, N. C., November 19—[Special.]—Leonard Tufts, owner and developer of Pinehurst, N. C., the celebrated winter golf resort of America, and other capitalists and golf enthusiasts have purchased 4000 acres of land midway between Pinehurst and Southern Pines, where they plan to establish a new exclusive golf resort. The new development will be known as Knollwood, and the Knollwood Company has been incorporated, with Mr. Tufts as temporary president, for carrying on the work.

The company plans to subdivide and sell off half of the 4000-acre tract for residential development purposes and to lay out two 18-hole golf courses. Work has begun on the new development by the cutting of a highway through connecting with Pinehurst and Southern Pines. In the center of the development will be erected a 100-room clubhouse, and in the not distant future it is hoped the erection of a large resort hotel similar to the Carolina at Pinehurst will round out the plan. The landscape work at Knollwood is being done by Warren Manning, and Aymar Embury has drawn up the plans for the clubhouse and is in charge of its erection. The golf courses have been laid out over an ideal golfing country by Donald Ross, and will bring the number of courses in the Pinehurst-Southern Pines district up to seven. This section has long been famed as the largest golfing center of the world, for it is stated that on the Pinehurst links are employed over 500 caddies, and several thousand people may some time be seen on the field during the height of the season.

Those behind the enterprise are Leonard Tufts, Pinehurst; L. M. Boomer, identified with the Dupont interests in the ownership of many hotels; H. B. Swone, Philadelphia; James Barber, New York; Horace Rackham, Detroit, and others prominent in the golfing life and resort development work of Pinehurst and Southern Pines.

It is said the establishment of Knollwood has exerted a marked influence on Pinehurst development plans. Residential plots are being taken up along the new boulevard, and new golf links are projected on the Knollwood side of Pinehurst. Among the more striking building operations at Pinehurst is the erection by Mr. James Barber of the Barber Steamship Co. of a strictly fireproof residence.

Mr. Tufts stated that rapid progress is being made in the development of the section, and the comprehensive plan outlined for Knollwood is awaiting the approval of the stockholders, who will hold a meeting next week.

H. L. CLARK.

## Campaign to Reduce Mine Accidents.

Charleston, W. Va., November 6—[Special.]—In addition to bringing the West Virginia Department of Mines to a high state of efficiency through his insistence that the department be kept out of politics and that efficiency be the only criterion of service, Gov. John J. Cornwell is signaling the end of his administration by the suggestion of a campaign to eliminate accidents in the mines of the State through the exercise of greater care on the part of the miners. A State-wide "safety-first" campaign will be undertaken during the first half of December with Robert M. Lambie, chief of the Department of Mines of West Virginia, in charge. Fatal accidents were reduced last year by 57 in the mines of the State.

## Campaign to Increase Blooded Stock.

Canton, Miss., November 21—[Special.]—A dairy campaign to increase the number of blooded stock in Madison county is to be launched here December 6 and close December 10. Dairy experts from the Illinois Central Railroad, the Mississippi Agricultural and Mechanical College and local workers will tour the entire county in teams, holding meetings at various communities. The campaign is being fostered by the Madison County Chamber of Commerce. It is planned to bring in 200 head of pure-bred Jerseys to sell to farmers, who will be assisted in purchasing them by the county banks, who have agreed to accept long-term notes. Madison county already has about 40,000 head of blooded cattle.

## Industrial, Banking and Foreign Trade Matters Discussed at Petroleum Institute.

Washington, November 20—[Special.]—The three-day session of the American Petroleum Institute was concluded with a banquet at the New Willard Hotel last night.

The principal address was delivered by Mr. M. L. Requa, who discussed the necessity of wise conservation by the industry voluntarily. He referred to the statement of Senators Calder and Edge in which they threatened to introduce a bill for the control of the coal industry unless prices were materially reduced by December 6, and said: "Because I do not want any similar statement made regarding the petroleum industry, I am so insistent that you practice co-operation and conservation."

Senator Robert L. Owen spoke on the subject of the Federal Reserve Banking System. He said:

"If the United States were to issue its Federal Reserve Notes in the same ratio as the John Bradbury notes which are used in England, the amount of those notes that could be issued for the accommodation of commerce would rise to \$16,000,000,000. You do not need over a billion. That is enough. The country does need a little more accommodation than it is getting just now, but this Federal Reserve System can extend a billion or two or three of credit without the slightest difficulty and without the slightest harm to the system and without putting the system in any jeopardy whatever.

"I say that upon my authority as a man who has given the most critical examination to that measure, and one who has studied it from beginning to end, and one who has framed it; because I framed that act. I can understand it if any man in American does understand it; and I protest against an administration of the act which causes the people of this country to feel that they cannot get credit when they are entitled to credit in the productive processes of America."

One of the grave questions confronting the Institute was the disposition of foreign nations to monopolize for their own nationals all resources, and likewise to exploit in the same way the mandatories confided to them.

Under Secretary of State Davis, who was to have delivered an address, determined otherwise, probably because the State Department was just sending to London its second note protesting against the British activities in Mesopotamia. Lord Robert Cecil and other leading Englishmen have been contending for some time that in mandated territory, under the League of Nations, equal exploitation and trade rights must be afforded all countries, but the British official view has been that the country holding the mandate should make such rules and regulations as it thought advisable, irrespective of the rights of other nations. The question is rapidly becoming an acute issue in international politics.

## Virginia's Industries on Firm Production Basis.

Richmond, Va., November 20—[Special.]—According to the annual report of the State Labor Commissioner, there are now 3000 concerns engaged in manufacturing, mining and building operations in the State, representing a total investment of \$333,155,688 and employing an average of 137,027 persons for the year 1919. The total amount paid in salaries or wages, exclusive of salaries paid officials, amounted to \$112,291,628 for the year.

The total value of the output of these concerns during the fiscal year was \$653,842,300, which was \$251,211,575 lower than the previous year's report. The decline in value is attributed to the change from war to peace-time production.

During the war there was a great increase in production along certain lines, particularly those industries engaged in making war materials and supplies, the building of ships, etc. A proper comparison of the activities in 1919, therefore, would be with those of 1916, the year preceding the war, says the report. The total value of output of 1919 was nearly double that of 1916, the increase being \$274,312,781.

"Taken on the whole," says the report, "the industries of the State are in a more healthy condition today (the calendar year 1919) than in any previous year in their history, and present signs indicate that Virginia will soon rank well up among the manufacturing States of the country."

### Activity in Oil Fields Despite Stringent Financial Conditions.

Oklahoma City, Okla., November 8.—[Special.]—Within 48 hours after the result of the election was known New York interests were wiring their Oklahoma agents releases from restrictions and the authority to get busy. Probably the most notable of transactions relate to Mexico, into which oil men had begun to migrate even before the election. The lid is off so far as explorations of the Southern Republic are concerned. Nobody expects results until after the first of the year. No matters relating to oil are likely to be presented to President Obregon before that time. A good many oil men, however, plan to be present when Obregon is inaugurated, and some of them will remain until after the diplomatic negotiations are ended and the Cabinet selected and installed.

Business generally felt an impulse after the election. No line needed more to feel it than oil. What oil needed immediately was money for development, and that money had to come from banks, for the lease doors of the big concerns are to remain closed until after the first of the year. However, if the money situation is relieved to the extent that oil men now predict, it looks as though there is soon to be an opportunity for activity again for the operator who must sell leases to get money to drill. The operator of that class is looked upon by even the major concerns as indispensable to the industry.

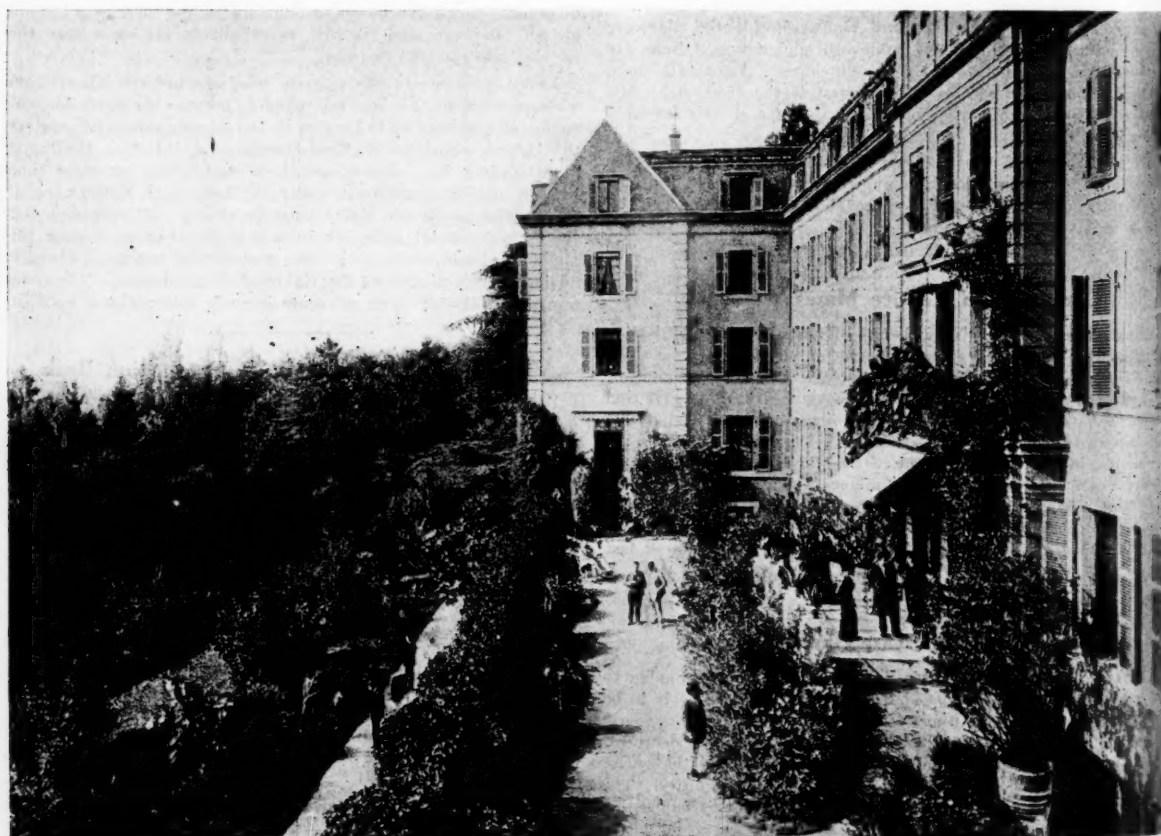
Several new fields in Oklahoma have been proven and await development when money is available. In addition to this long delay in development is the near approach to expiration of leases. Unless money can be had or renewal terms can be made with landowners, tens of thousands of acres of good leases will be forfeited. Never in the history of the industry has there been such a large number of takeoffs, which are abstracts of county and Federal records, and which contain all data with reference to oil and gas leases. They show to whom the leases

were executed or assigned and the date of expiration. They are valuable possessions in the hands of lease men who watch for the opportunity of contracting for leases upon expiration, for it happens frequently that either the original lessee cannot renew or he overlooks the date of renewal.

Valuable leases, tied with a contract that drilling must be done by a certain date or the leases forfeited, have in a number of instances had what are known as overhead bids placed upon them. One case was of a man who offered \$25,000 for such a lease, half of which he paid in cash. He was gambling that the lessee would fail to perform his contract. The lessee did not fail, however, and the overhead buyer forfeited the cash he paid.

The S. D. (shutdown) sign has been the most significant memorandum on the daily scout reports of oil companies during the last six months. It meant in a majority of instances that the operator was out of money, but it did not mean in many cases that he or his company was facing bankruptcy. It meant that no leases could be sold, if any were for sale, or that local banks were not in position to finance either speculative or non-speculative enterprises. It is a significant fact, probably heretofore mentioned in these reviews, that, in Western Oklahoma, for example, big oil concerns have been the most active in wild-cattling. In that region the Magnolia Petroleum Co., the Pierce Oil Corporation, the Amerada Petroleum Corporation, the Lone Star Gas Co., the Empire Gas & Fuel Co. and probably a few others of that caliber continued with little interruption during the summer and early fall.

A region of the central part of the State that is attracting unusual attention lately stretches from the new Cushing pool in Payne county southwest through Pottawotomie, Logan, Lincoln, Oklahoma, Cleveland and Pontotoc counties and terminates, for the present at least, in the vicinity of Davis, in Murray county. Texas concerns recently have secured large blocks of leases in the northwestern part of Pontotoc and the northeastern part of McClain counties. There five deep tests are to be drilled. Kan-



SOUTHWEST TERRACE OF "LA CHATELAINE," GENEVA, SWITZERLAND, HEADQUARTERS OF THE INTERNATIONAL LABOR OFFICE, LEAGUE OF NATIONS.

sas City concerns have entered the Davis section, bought several thousand acres of leases and made several locations to drill. One or more tests are to be drilled on the north side of Pottawotamie county.

Big and little concerns are in a feverish contest for shallow production in the eastern part of Stephens county. Four pay sands have been found there above 1000 feet, and their average settled production is in the neighborhood of five barrels of high-grade oil. Machines are used principally for drilling purposes. In two townships 35 of these are operating. Before Christmas several deep tests in that region should be completed. Camps, material yards and towns have been established there during the last few weeks, and that region has been made into a separate operating district by at least three companies.

The Hewitt field is being rapidly developed and promises to surpass the Healdton field in settled production and probably in area. With the field fairly well defined, wildcats are drilling in several directions. A region of special interest lately is in the township adjoining the Hewitt township on the southeast, where the Magnolia Petroleum Co., the Roxana Petroleum Co., the Carter Oil Co. and others are well represented with leases. Wildcatting is extending in that direction also all the way to Red River. In Love county the Shaffer Oil & Refining Co. and the Manhattan Oil Co. are drilling two tests.

Indications now are that activity on each side of Red River in the disputed territory now in the hands of Federal receivers will be lax until after the United States Supreme Court has settled the boundary controversy. An event of the month is to be the hearing by the Supreme Court of arguments in the case. These are to take place on the 15th.

Interest has been renewed in allotments of Kiowa and Comanche Indians in the southwestern part of the State, and future sales of leases at the Kiowa Agency at Anadarko are likely to be better attended. The last sale was almost unproductive of results. Bidders refused to buy at the appraised values. Wildcatting is going on over much of Comanche and Caddo counties,

where many Indian tracts are situated, and Kiowa county, another of the original Comanche country, is to get two or three deep tests soon.

One of the few production sales of the latter half of the year was made recently by the Permian Oil & Gas Co. of Kentucky, through R. R. Pierce & Co. of Oklahoma City, to Minnesota interests. The property consisted of a 40-acre lease in the Walters field, making 90 barrels daily from two wells, and the consideration was \$82,500.

### Magic Cities Still Rise in Texas with New Discoveries of Oil.

Breckenridge Tex., November 19—[Special.]—Today the population of Breckenridge exceeds 20,000 and is still increasing at the rate of several hundred persons a month. There are 25,000 regular patrons of the postoffice. Before the oil discovery in March, 1920, the population was about 1000. Breckenridge was then situated 30 miles from the nearest railroad point. It was a typical sleepy, unprogressive village. The Ranger and other Texas oils booms did not disturb the people of Breckenridge. With the discovery of oil within the limits of the town, a boom was started which has added nearly 19,000 people to the population in less than a year. Some of the original inhabitants got into the game, and have become millionaires. Breckenridge, however, is a town of new faces, of a mixed element of citizenship, gathered from the four winds. The oil pool has yielded millions of barrels of oil, the present production being at the rate of about 120,000 barrels a day. The most remarkable achievement of this field is that up to this time not a single "duster" or dry hole has been drilled. All of the wells are producers, and their daily production ranges from 500 barrels to as high as 11,000 barrels.

Some idea of the wealth that has come to the people of the town as the result of the oil development may be had, when it is stated that the aggregate deposits of the three banks here



RESTROOM IN "LA CHATELAINE," HEADQUARTERS OF THE INTERNATIONAL LABOR OFFICE OF THE LEAGUE OF NATIONS AT GENEVA, SWITZERLAND.



amount to \$9,000,000. Before oil was found they totaled \$127,000. The \$9,000,000 does not by any means represent the wealth that has come to the local people. Many of them have enormous cash deposits in banks in other towns.

Along with the phenomenal growth of the town came the construction of railroads. Already two railroads have been built into and through Breckenridge, and a third line is being constructed. Last month the freight receipts at Breckenridge totaled \$400,000. The county's taxable value in 1917 was \$3,500,000. This year it is \$30,000,000, and this does not include the derricks erected and wells drilled this year. Next year the taxable valuation is estimated at \$60,000,000 or more.

The city cannot accommodate the people that are pouring in. Fully 2000 tents are being used for living quarters at present, and approximately 10,000 people are lodging in rooming-houses and temporary shelters.

It is asserted by the local municipal authorities that Breckenridge is the best governed of any oil town in Texas. Gambling, bootlegging and other law violations, which made some of the mushroom oil towns of other producing districts so notorious, are not tolerated here.

Municipal construction is keeping pace with private enterprise. Bids have been advertised for the construction of a \$75,000 viaduct, while next month the citizens of the town will vote on a \$300,000 bond issue for street improvement, and another \$250,000 for sewerage construction.

### Record Figures for Okmulgee County Oil—Production Has Trebled in Three Years.

Okmulgee, Okla., November 6—[Special.]—Okmulgee county oil production thus far in 1920 has already exceeded the production of the entire year of 1919, according to the pipe-line runs for the first nine months of 1920 as compiled by the purchasing companies and the United States Geological Survey. These figures, issued on October 28, show that in the first nine months of 1920 Okmulgee county produced 12,514,628 barrels of oil, as compared with 7,353,392 barrels produced in the first nine months of 1919. The gain in the first nine months of 1920 over the first nine months of 1919 was 5,160,035 barrels, or 69 per cent. No other county in Oklahoma and no field in the United States shows as large a percentage of gain.

The only other fields in Oklahoma to show a gain of more than 1,000,000 barrels in the first nine months of 1920 were the Osage, which gained 4,360,472 barrels; Carter county, containing the Healdton, Hewitt and Fox pools, which gained 3,940,701 barrels, and Pawnee county, which gained 2,681,819 barrels.

The 1920 figures show that the oil production of Okmulgee county has trebled in three years. The production of the county during the entire year of 1919 was 11,272,749 barrels less than was produced in Okmulgee county in the first nine months of 1920.

At the present rate of production, Okmulgee county will produce more than 17,000,000 barrels in 1920, bringing to the producers of the county an income from crude oil alone of more than \$62,000,000. The total production of the county in 1919 was 11,272,879 barrels and the production in 1918 was 6,604,865 barrels, so that the production of the county has practically trebled in the past three years.

In the first nine months of 1920 Okmulgee furnished one-third of the gain made by the entire State of Oklahoma and one-tenth of the gain made by the United States, according to the official pipe-line runs.

### More Prompt Delivery of Materials at Tampico—City Filling Up With Oil Speculators.

Tampico, Mexico, November 1—[Special.]—One of the important features of the oil industry in Mexico is that orders for materials for pipe-lines and other adjuncts of the production, transportation and refining of the product are now being filled with more promptness than for any time during the last two or three years. Big quantities of these materials are now going into the different fields and to the terminals of the respective companies. With additions to the fleets of tank steamships that are now in prospect, the exportation of petroleum and its products

from Tampico, Port Lobos and Tuxpam will show a large increase within the next few months, it is expected.

As a result of the restoration of tranquility in Mexico, a new and striking feature of the oil industry has suddenly developed. It is the pouring into the country of hundreds of speculators and wildcatters, who are leasing the possible oil rights of land wherever it may be situated. Most of these leases are regarded as worthless so far as offering any prospect of oil production is concerned. In many instances the leases are to be made the basis for organizing companies and the sale of stock to credulous and poorly informed people in the United States, according to the beliefs of legitimate oil operators here. In Tampico, the hotels and lodging places are overflowing with this hysterical and more or less irresponsible element of humanity. They are coming in by every train and every boat. The city is rapidly taking on a veritable Western boom-town appearance. Prices have gone soaring, and the men who are well settled in the oil industry and other lines of business here complain of having to bear the brunt of the increase of prices that the influx of persons has brought upon them. Of course, many of the visitors are here for the purpose of making legitimate investments, and the industry will benefit by their coming.

### Several New Large Mexican Producers.

Tampico, Mexico, November 1—[Special.]—During the month of October the Freeport & Mexican Fuel Oil Corporation added enormously to its production by bringing in three new wells. The largest and latest of these wells has a daily flow of 80,000 barrels, and is located in the Amatlan field; another has a production of 50,000 barrels a day, and is also in the lower country, while the third well has a daily output of 2500 barrels, and is at Panuco. With this addition of 132,500 barrels a day production in one month, the Sinclair interests are placed in strong position, so far as its available supply of oil in Mexico is concerned. It expects to provide facilities for handling the increased production as quickly as possible.

With the bringing in of new wells and the expansion of the proved areas of the Gulf coast territory of Mexico came the disappointing news recently that the once famous Chinampa field is apparently doomed to destruction by salt-water invasion. The appearance of salt water in the "Deacon Thompson" well No. 1 and the Transcontinental Petroleum Co.'s well, both in the Chinampa field, is given as the reason for the discouraging forecast of the probable end of production there by oil operators. It is stated, however, that the wells at Chinampa which are now under way will be finished in the hope that they may flow for a time, at least. The well of the Union Oil Co. at Chinampa will be pinched down to 20,000 barrels a day and the well of the Empire Gas & Fuel Co. to 15,000 barrels a day in an effort to prolong their life, it is stated.

### New Refinery Running at Capacity.

Shreveport, La., November 19—[Special.]—The new refinery of the Caddo Central Oil and Refining Corporation here is operating at full capacity. It has a daily capacity of 4000 barrels, which, together with the output from the original 3000-barrel plant, gives a daily total of about 7000 barrels.

For distribution of the finished products the refinery maintains and operates 800 tank cars, enabling it at all times to give good service to its customers. The refineries are served by two pipe lines, one from the Caddo fields to the north and the other from the Bull Bayou fields to the south. Most of the finished products are distributed through the Southeast and East and Middle West.

The new refinery involves the latest type of construction and equipment, and is situated on a tract of over 100 acres.

### Jacksonville to Nassau and Cuba.

A report from Jacksonville, Fla., says that a regular steamship service was begun November 21 by the Miami Steamship Co. between Jacksonville and Nassau, to be followed immediately by passenger and freight service between Jacksonville and Havana, the steamship Cuba, electrically operated, being placed on the route.

### To Finance Foreign Trade.

Laying emphasis upon the immediate need of financing the foreign trade of this country, President John S. Drum of the American Bankers' Association is sending to every bank in the United States a prospectus of the \$100,000,000 Foreign Trade Financing Corporation which has been proposed by the association's committee on commerce and marine. This prospectus has resulted from a series of meetings held in New York by a committee with John McHugh, vice-president of the Mechanics and Metals National Bank, as chairman, to arrange for a meeting in Chicago on December 10 and 11 to consider organizing the proposed corporation under the Edge law. Prominent men from all parts of the country have been invited to attend, and the prospectus indicates that banks, business bodies and individuals will be invited to subscribe to the stock in the corporation. It is stated that special assistance to any one country is not considered, but that the aim of the plan is to encourage America's foreign trade in its entirety. Besides Mr. McHugh and President Drum, the committee of arrangements for the Chicago meeting includes Chas. H. Sabin, L. E. Pierson, Fred I. Kent and others of New York; John H. Fahey of Boston, Senator Walter E. Edge of New Jersey, and others.

In this connection it is interesting to note that subscriptions are being received in Georgia for the stock of the Federal International Banking Co., recently organized at New Orleans with proposed capital stock of \$6,000,000, of which total \$1,500,000 is to be taken in Georgia.

### \$3,000,000 Factory and Export Warehouse to Be Erected in New Orleans.

Construction will begin in the near future on a \$3,000,000 manufacturing and distributing plant in New Orleans for the International Harvester Co. of Chicago. The new plant, which is to be a huge twine factory and export warehouse, is to be erected for the combined purpose of distributing plant for tools and machinery to the countries of Central and South America, and also for the manufacture and distribution of twine.

Twenty-eight acres of land have been secured across the river from Napoleon avenue with a river frontage of about 600 feet. Arrangements have been made with the Dock Board of New Orleans providing that the company may build docks along the waterfront at a cost of more than \$250,000.

### Louisville Plans Big Advertising Campaign.

Louisville, Ky., November 20—[Special.]—A \$100,000 advertising campaign to exploit the advantages of Louisville as a complete market is planned by the Merchants and Manufacturers' Association of this city during 1921, according to announcement by Edward Ezzel, president of that association, and one of the prominent wholesalers and manufacturers of the South. The plans include an intensive and sustained broadside of publicity in metropolitan newspapers, trade journals and direct by mail distribution of folders, and active co-operation with the 5000 salesmen traveling out of Louisville.

### The Cotton Movement.

In his report of November 19, 1920, Col. Henry G. Hester, secretary of the New Orleans Cotton Exchange, shows that the amount of cotton brought into sight during 111 days of the season was 3,695,952 bales, a decrease from the same period last year of 698,643 bales. The exports were 1,414,824 bales, a decrease of 80,720 bales. The takings by Northern spinners were 370,103 bales, a decrease of 421,317 bales; by Southern spinners, 890,014 bales, a decrease of 388,025 bales.

### Mechanical Engineers to Hold Annual Meeting.

The forty-first annual meeting of the American Society of Mechanical Engineers will be held on December 7 to 10 in the Engineering Societies Building, 29 W. 39th street, New York. The keynote of the meeting is to be transportation.

### Renewed Interest in Coal Beds in Abram Creek-Stony River Field.

Elkins, W. Va., November 8—[Special.]—Because of the advancing exhaustion of the coals of the Georges Creek and North Branch of the Potomac districts, interest has been aroused in the Abram Creek-Stony River coal field, in Northeastern West Virginia. This field lies mainly in Grant, Mineral and Tucker counties, and is a southward continuation of the Georges Creek and Elk Garden fields. It has a special interest because it contains a large body of low-volatile, semi-bituminous coal at a point nearer tidewater than any other of the Appalachian coals except those of the Georges Creek and Upper Potomac fields.

The coal of this area is at present almost entirely undeveloped, as the district has been largely without railroads. Indeed, until within the last year or two, the Stony river coal field has been almost entirely overlooked by coal men, although highly regarded by geologists. Within the last year, however, development has been begun, and within a few years large operations are anticipated. It will require only a few miles of branch roads to connect the field with the Western Maryland Railway or the Baltimore & Ohio.

From the three beds of coal in the Abram Creek-Stony River field it is estimated that a total of 422,760 tons are available for mining. If all the good coal of the Davis bed were recovered, it would probably yield five feet of coal, or 379,200,000 tons for that bed in the area, increasing the total for the three beds to 524,520,000 tons.

Experts say that the nearness of the field to tidewater is of importance in view of the probable use of the coal as bunker coal and for export. This field is now in the area served by the Western Maryland Railway, on which the distance from Harrison, at the mouth of Abram Creek, by way of Cumberland to Baltimore, is 214 miles. The distance between Piedmont and Baltimore by the Baltimore & Ohio freight line is 187 miles, to which must be added the distance from Piedmont to points on Abram Creek or Stony River.

### New Automobile Factory at Charlotte.

Charlotte, N. C., November 19—[Special.]—Automobiles to be manufactured at the plant of the Wizard Automobile Co. will be exported to many countries of the world through a contract placed by Oscar Stephenson, general manager of the Manufacturers and Exporters' Alliance, New York, with the local concern, according to statements made here. The company has secured a large tract of land for a factory to be built in units of 100x400 feet, of steel on concrete foundations. One building has already been completed, and a large amount of machinery, said to be worth \$200,000, is now on the ground awaiting completion of the remaining buildings. An ultimate capacity of 10,000 cars yearly is planned. The cars will be made in roadster and touring types and be of light construction.

The demand for machines of this type in normal times is large in foreign countries, as well as in America, and already inquiries have been received from European countries and Pacific Coast States.

### Eleven-Story Office Building for Clarksburg.

Clarksburg, W. Va., November 21—[Special.]—Clarksburg is to have a new office building, 11 stories high, plans having been perfected by Curtis E. Prunty, local coal operator and real estate dealer, for its erection. Work of excavation was started on a site at the corner of 3d street and Modoc alley, opposite the courthouse of Harrison county. The new structure, when completed, will be higher than any of the present buildings in this city.

### \$600,000 Distributing Warehouse for Dallas.

A 10-story distributing warehouse will be erected at Dallas, Tex., at a cost of \$600,000 by the Oliver Chilled Plow Works of South Bend, Ind. The site of the new building, which was purchased for a consideration of \$90,000, is at Jefferson and Market streets. The new structure will have a floor space of 284,000 square feet, and it is expected that construction will be completed not later than August of next year.

# A London Estimate on World's Iron Ore Supply

F. H. Hatch, in the London "Times Trade Supplement" has made an estimate that the great ore fields of Europe and America, namely, the United States, Cuba, Newfoundland, Brazil, Scandinavia, Central Europe, the United Kingdom, Spain and North Africa, contain deposits of 30,300,000,000 tons, divided as follows: High-grade low phosphorus, 6,740,000,000 tons; high grade, 6,460,000,000, and low-grade ores, 17,100,000,000.

The review as quoted by the New York Journal of Commerce says that another 1,500,000,000 tons should be added for the smaller ore fields of Russia, Austria and Greece in Europe, and Chile, Venezuela, Mexico and Canada in America, making a grand total for the two continents of 31,800,000,000 tons, of which the equivalent iron is 14,310,000,000 tons, or, on the basis of a pig-iron production of 70,000,000 tons a year, sufficient to last over 200 years.

The resources of the Continents of Africa, Asia and Australia are unknown, but it has been shown that important deposits exist in South Africa, Australia and India, and others are known, for instance in China, Korea and Japan. Moreover, having regard to the very large unexplored areas of these continents, the existence of great reserves as yet undiscovered is very probable. On the whole, adequate iron-ore supplies for the chief smelting centers of the world seem reasonably secure for a remote future.

One fact, important for the makers of hematite steel, clearly emerges, and that is the relative scarcity of low-phosphorus ore. Excepting the great reserve of the very highest quality ore in Brazil, the known reserves of low-phosphorus ore in the rest of the world only amount to some 1,740,000,000 tons, the bulk of which is in the United States. The European resources of this class of ore are small and rapidly diminishing, and the claims on them are increasing. Spain is engaged in the development of a new iron and steel industry, and France will require a large proportion of the North African ore. The British ironmaster, if he is to continue making hematite steel, will sooner or later be driven to seek his ore supplies outside Europe, and this fact indicates Brazil as the future main source of this class of ore.

## Great Britain.

Of the 15,000,000 tons of iron ore produced in 1918 in the United Kingdom, 80 per cent consisted of Jurassic ironstones, 10 per cent of West Coast low-phosphorus hematite, 8 per cent of Coal Measure ironstone and 2 per cent came from miscellaneous sources. An estimate of reserves was made by the Geological Survey in 1917. Taking the Jurassic ironstones first, the following are the tonnages arrived at for "reserves partially developed" under the headings of ore to be got (1) by open-cast work, and (2) by underground mining, for the ore won during the years 1917-1919 (000's omitted):

Reserves partially developed.	Opencast mining. Tons.	Undergr'd mining. Tons.	Total reserves. Tons.
Cleveland main seam (North Yorkshire) .....		177,000	177,000
Marlstone (Lincolnshire, Leicestershire, Oxfordshire and Warwickshire) .....	94,000		94,000
Frodingham bed (North Lincolnshire) .....	154,000	336,000	490,000
Northampton bed (Northamptonshire, Huntingdonshire, Rutlandshire and Lincolnshire) .....	1,344,000	539,000	1,883,000
Total .....	1,592,000	1,052,000	2,644,000

In addition, 26,000,000 tons are assigned to the Westbury ironstone and 10,000,000 to the Raasay ironstone, neither of which is at present being worked as a source of iron. This brings the total for the Jurassic ironstone to 2,680,000,000. It is not claimed that these figures are estimates of actually merchantable ore. In all, the low-grade ores of the United Kingdom are estimated at 3,219,000, or, in round figures, about 3,000,000 tons of 30 per cent ore.

The reserves of low-phosphorus hematite of Cumberland and Lancashire are estimated by the survey at 40,000,000 tons. The grade may be taken at near 50 per cent.

## Spanish Ores.

Spain has in the past been the principal source of supply for the high-grade low-phosphorus ores used in European furnaces.

The production reached 10,000,000 tons in 1913, but fell to about half that amount during the war. For many years British makers of hematite pig for Bessemer and Siemens-Martin steel works have derived the greater proportion of their ores from Bilbao (some 2,500,000 tons per annum); but three-quarters of the workable ore has already been mined, and for some time there has been a gradual deterioration in quality, due to the exhaustion of the richer mines.

The Stockholm estimate for the actual reserves of Spain, brought up to date by the Imperial Mineral Resources Bureau, is 650,000,000 tons, of which 28,000,000 tons are credited to Bilbao.

Swedish iron has long been celebrated for its purity and general excellence. The low-phosphorus ore used in its manufacture is in the main magnetite and comes from a number of old mines in Southern Sweden, among which may be mentioned the Dannemora and Pereberg mines. It is smelted locally with charcoal, and the reserves are comparatively small. In central Sweden there are some large hematite deposits, as, for example, those of Grangesberg and Norberg, which yield ore averaging 60 per cent iron and high in phosphorus. The reserves are estimated at about 100,000,000 tons. The main resources of Sweden are in Lapland. These deposits consist mainly of magnetite, which as a rule is high in phosphorus, although a trifling proportion is of acid Bessemer grade. The largest ore bodies are those of Kiirunavaara and Gellivare, the former, together with Luossavaara, being credited with a reserve of 738,000,000 tons and the latter, including Kokullskulle, with 265,000,000. Both ore bodies were formerly worked on the open-cast system, but underground mining has recently been substituted at Gellivare.

In Norway the deposits, although large, are of low grade and require concentration. The present production is small. The raw ore averages from 30 to 35 per cent iron, and is worked open-cast, but a smaller quantity of 50 per cent ore is mined. The reserves are estimated at 100,000,000 tons. At Dunderland, on the west coast, there is a large deposit of mixed hematite and magnetite in association with apatite, the raw ore averaging about 35 per cent iron, with a high phosphorus content. The reserves are estimated at 150,000,000 tons.

The estimate of the Scandinavian reserves as a whole, made by the Swedish geologists for the Stockholm report, but revised and brought up to date by the Imperial Mineral Resources Bureau, is as follows:

	Reserves, Tons.	Average iron content, Per ct.
Northern Sweden .....	1,003,000,000	60
Central and southern Sweden .....	116,000,000	57
Norway .....	350,000,000	35
Total .....	1,469,000,000	54

## Central European Beds.

The "minette" ore field, which extends over a portion of Alsace-Lorraine, Luxemburg and Belgium, is the most important as regards quantity in Europe. This field in 1912 produced 44,000,000 tons, or 28 per cent of the world's output. The reserves are very large, being generally put down at about 5,000,000,000 tons. Besides the minette ores, France possesses in Normandy, Brittany and Anjou oolite bedded ores of Ordevician age. The ores average from 45 to 48 per cent iron, 10 to 20 per cent silica and 0.4 to 0.8 per cent phosphorus. The Normandy deposits are smelted to basic iron at the Monderville works, near Caen, and the Brittany and Anjou deposits at the Trignac works, near St. Nazaire. The reserves are estimated to be about 200,000,000 tons. With the cession of Alsace-Lorraine Germany lost its biggest ore field, but it retains a number of smaller producing districts, the reserves of which amount to some 1,300,000,000 tons.

## United States Supplies.

The Lake Superior district produces four-fifths of the iron-ore output of the United States. In 1918 it was 86 per cent of a total of 70,000,000 tons. The average iron content of the ore mined is decreasing, having fallen from 54.2 per cent in 1902 to 52 per cent in 1912. The phosphorus content, too, is increasing, the percentage of Bessemer ore having fallen from 64.9 in 1902 to 41.9 in 1912.



From the iron ranges the ore is railed to the shipping ports of Duluth, Ashland, Marquette and other ports at the western end of Lake Superior, and from there shipped by water to be smelted in Chicago, on the shore of Lake Michigan, or at Cleveland and Buffalo, on Lake Erie. The bulk of it however, is passed on by rail to Pittsburgh and other industrial centers of Pennsylvania and Ohio, the total distance by water and rail to Pittsburgh being about 1200 miles, and thus greater than that of the iron mines of Spain and Scandinavia from British or German furnaces. Cheap water transportation on the Great Lakes has made this possible. The ore ships are loaded direct from the ore trains at the rate of 10,000 tons in half an hour and discharged at the receiving dock in less than half a day. In 1913 the rate for water transport and unloading averaged less than 0.07 of a cent per ton-mile. Although navigation is closed for five months in the year and a stock pile of 25,000,000 tons has to be accumulated at the loading end, over 60,000,000 tons a year are conveyed in this manner, and by the end of 1918 the Lake district had marketed no less than 900,000,000 tons of ore.

A recent estimate of the available reserves at Lake Superior is 2,750,000,000 tons of an average grade of 52 per cent iron.

#### Other American Fields.

The red or Clinton hematites are bedded oolitic ores of Silurian age cropping out on the eastern flank of the coal field from Maryland through Virginia and Tennessee to Georgia and Alabama. They reach their highest economic development in the Birmingham district of Alabama, although they are also worked in Georgia and Tennessee and to a small extent in Virginia. Including brown ores, these Southeastern States in 1918 produced 10 per cent of the whole iron-ore output of the United States. The available reserves are estimated at 1,750,000,000 tons of 26 per cent grade phosphoric ore. Northeastern States have undeveloped reserves, with an average grade of 35 per cent iron, of 2,500,000,000 tons.

The following table gives the most recent estimates (Mineral Industry, 1918) of reserves and those made for the Stockholm Geological Congress:

#### STOCKHOLM ESTIMATES.

	Tons.
Lake Superior .....	3,500,000,000
Clinton ores .....	505,300,000
Miscellaneous .....	252,500,000
Total .....	4,257,800,000

#### RECENT ESTIMATES.

	Tons.
Lake Superior .....	2,750,000,000
Southeastern States .....	1,750,000,000
Northeastern States .....	2,500,000,000
Total .....	7,000,000,000

Neither estimate includes the low-grade Clinton ores or the low-grade siliceous ores of the Lake district, of both of which there are enormous quantities.

#### The Brazilian Reserve.

One of the greatest ore reserves of the world, and certainly the greatest reserve of ore suitable for the acid Bessemer process, is situated in the Province of Minas Geraes in Brazil. The ores are hematite and magnetic, and occur in rocks similar to the banded jasper of North America and South Africa. They vary in grade, but the average iron content is over 60 per cent and the phosphorus in the main well below the Bessemer limit. E. C. Harder states that the largest deposit contains at least 350,000,000 tons, and that there are numerous ore bodies of 10,000,000 to 50,000,000 tons. Their possible aggregate tonnage is enormous, but with the present means of transportation the greater portion is inaccessible. Before the war capital was being found to develop these fields and to provide transportation, and it cannot be long before such valuable deposits will be utilized in the world's markets. The ore will probably be exported in large quantities to British and American Bessemer furnaces.

#### Cuba's Assets—Newfoundland Ore.

The Stockholm estimate for Cuba was 1,903,000,000 tons. More recent estimates agree in placing the reserves at 2,500,000,000 to 3,000,000,000 tons of crude ore (36 per cent iron) for the lateritic blanket deposits on the north coast. Since it contains from 20 to 30 per cent of moisture and about 13 per cent of combined water, it is calcined in nodulizing kilns before being shipped to

Sparrows Point and Steelton in the United States, and loses thereby one-third of its weight. Mixed with other iron, the pig produced from these ores is used for making chilled castings, but the bulk of it goes to make steel for rails, truck bolts and motor-car parts. The steel is stated to contain from 1 to 1.5 per cent of nickel and from 0.2 to 0.7 per cent of chromium, with sulphur and phosphorus below 0.04 per cent.

No exact estimate of the iron resources of Newfoundland is possible, since, with the exception of a small area where the ore beds outcrop on Bell Island, the whole of this field is under Conception Bay. The ore is a dense bedded hematite averaging over 50 per cent iron, 0.8 per cent phosphorus and about 10 per cent silica, and therefore suited for the basic process. E. C. Eckel estimates the economically workable ore at 3,500,000,000 tons of 50 per cent ore within a radius of five miles of Bell Island. Newfoundland was credited with 3,635,000,000 tons in the Stockholm report.

Total reserves of Canada have been estimated at only 150,000,000 tons, but with the vast unexplored country in Northern Canada it is hard to believe that big reserves will not some day be discovered.

#### New Facts About India.

The following particulars with regard to India are taken from a note prepared by Dr. Coggin Brown of the Indian Geological Survey:

Important deposits of high-grade iron ore, mainly hematite, associated with banded jasper and in this respect similar to those of Lake Superior and Brazil, have recently been opened up in India. The best-known deposits are those of Mayurbhanj and Singhbhum, in Bihar and Orissa; Chanda and Drug, in the Central Provinces; Kadur, in Mysore, and Goa. The Mayurbhanj deposits are being worked by the Tata Iron & Steel Co. at Gurumashini, where a lens of hematite has been proved to contain 15,000,000 tons for every 10 feet of depth. This ore averages over 60 per cent iron; manganese, 0.8; sulphur, 0.01, and phosphorus, 0.09. The reserves of high-grade ore already partly proved in India may be safely put at several hundred million tons, and the prospects are favorable for the existence of very much larger quantities.

#### Africa and Australia.

Iron ore of various types is known to exist in South and West Africa. Lateritic deposits similar to those of Cuba, and characterized by a rather high silica and alumina content and small percentages of nickel, chromium, manganese, etc., are common in many parts of the country. One deposit in French West Africa has recently been found to have a reserve of 100,000,000 tons and to yield a nodulized product running over 60 per cent iron.

High-grade ores (averaging about 50 per cent iron) are found on the North Coast of Africa in various parts of the Atlas Mountains, in Algeria, Tunis and Morocco; in large part they are of Bessemer grade. The production of these fields amounted in 1913 to close on 2,000,000 tons, of which 750,000 tons went to the United Kingdom. It is estimated that the output can be increased by over half a million tons a year by completing the railway from the port of Bona to the Ouenza and Bou Kadra mines, which are in Algeria near the Tunisian border and about 75 miles from the coast. The reserves for North Africa have been estimated at 100,000,000 to 150,000,000 tons.

Little is known of the iron-ore resources of Australia, except that many important deposits exist both near the coast and in the interior. Some of these are at present being investigated in South Australia, Western Australia, Queensland and Victoria. A high-grade ore is being worked in South Australia by the Broken Hill Proprietary Co. at Iron Knob. The ore is carried at low cost by water transportation to the company's works at Port Waratah, near Newcastle, in New South Wales, where it is smelted to basic pig for open-hearth steel manufacture. Work at Iron Knob is at present restricted to quarrying, and the output is about 300,000 tons per annum. No figures as to reserves are available.

#### Rivers and Harbors Congress to Meet.

The Sixteenth Annual Convention of the National Rivers and Harbors Congress will be held in Washington, D. C., at the New Willard Hotel, on December 8, 9 and 10. Delegates to the convention will be appointed, as heretofore, by the Governors of the various States, by the Mayors and cities and by officials of commercial organizations.

# NEWS AND VIEWS FROM OUR READERS

[Publication in this department of letters from our readers does not mean that we either approve or disapprove the views expressed. We believe in a full and frank discussion of the mighty questions of the hour, for only in this way can the truth be found. Therefore we often publish letters with which we do not agree.—Editor Manufacturers Record.]

## The Merchants and the Manufacturers Are Suffering Like the Farmers from Bad Financial Domination of Country.

W. H. SHINDLER, Miller and Ginner, Hempstead, Tex.

Enclosed find check for renewal, as I can't afford to miss a single issue. It is a pity that we haven't more magazines like yours that is just to the South as well as the North. You know the South is suffering under a terrible strain and almost broke from sacrificing their cotton away below the cost of production. You know they were advised by the cotton convention in October, 1919, to put forth every effort to raise a bumper crop or the world would face a famine, and to raise at least a 15,000,000-bale crop of cotton. While the crop is a good deal less, you know the results. They will have to return to economic slavery again, as they have ever since the Civil War, while the speculators and spinners are living in luxury. Just compare conditions of the farmer, who has always clothed and fed the world, with that of the other side. It is enough to make them turn a deaf ear to patriotic appeals any more. They have no protection in any way or any form. You know how they were not helped by the Federal Reserve Board to hold their stuff so they could realize enough at least to pay the cost of production. From all indications, I think they will cut their crop in half, and some will not plant an acre and hold where they are able for another year, which is good.

It is time for patriotism to cease and let the rest of the world look out for themselves or get on the farm and try their hand and see how easy it is done. There is nothing on the market that fluctuates like the farmers' products. He is the goat, for the business world never has any sympathy for him.

## Tragic Error of Reducing Prices and Credits Arbitrarily.

E. L. CALDWELL, Corpus Christi, Tex.

The writer has noted with interest your editorials on the financial situation. From these I gather two ideas: That propaganda to reduce prices, first, and, second, to reduce credit, has been the object of the Federal Reserve Board. The writer is not an authority on such questions, and is only in the merchandising business of power farming machinery, and a distant observer of the conditions brought about by the two ideas. However, his impressions of results may be worthy of consideration.

It is my interpretation of conditions that the present high prices and the expansion of credit were the result of speeding-up requirements during the war, when everything was needed, together with the extravagant spending of money, both by those who earned it and by the Government. This rapid increase in production and credit brought about higher prices in everything. Within certain limits most everything was in proportion to each other, that is, prices of wheat and flour, cotton, steel and finished products were all in proportion to each other in prices, and these were in proportion to the amount of cash and credit in the hands of banks.

Since the beginning of this nation there has never been a time when the increased use of power has been so great as in the past five years. Viewed separately the use of automobiles, motor trucks, tractors, flying machines, electric, steam and water power have increased the power of man to create almost beyond comprehension. As a result of this we are producing many times more today, getting more from life and preparing to hold permanently first place among all nations, and be leaders in all productive affairs.

In consequence of these conditions it is natural that more cash and credit is required to take care of the increased goods and stocks and machinery and power that are required to create

and produce. In addition to this the nation's population has increased, and, therefore, more credit and cash is needed to take care of the increased individuals. As long as prices were high and reasonably in proportion to each other for commodities, there was an optimistic spirit in this country which indicates our ability to start new things and to develop more commerce, more business, which marks an era in the progress and development of America.

About the time this optimistic spirit reached its maximum a certain school or set of ideas in power presented the theory that prices and credit must be reduced arbitrarily. This reduction has been so artificial and sudden that many of the small concerns are with much difficulty keeping on an even keel, and many will beyond doubt lose their savings, and others will really sacrifice their investment on account of the temporary psychological condition brought about by the action of the Federal Reserve Board in their decisions. Individually, I feel the effect of this in this cotton area very severely, and when this condition is multiplied by millions of individuals it certainly retards the progress of the country.

It is apparent that thoughtful people realize the error in arbitrary reduction of prices and credit. This brings to mind the necessity, as soon as possible, to create some constructive method of changing the conditions, and I hope to see the MANUFACTURERS RECORD lead in this constructive set of ideas to replace these that have brought the country to such a serious condition.

## The Color Line as Viewed by a Louisiana Republican.

S. LOCKE BREAUX, Manager Rice Department, Gibert & Clay, New Orleans, La.

Your issue of November 11, article under the caption of "The Overwhelming Verdict." It so happens that I am a registered Republican in the State of Louisiana, and have been for the past 30 years, a matter of conviction with me as to principle. A few years ago, when our present Governor was active as a Progressive, he wanted me to help him stump the State, but I refused unless he came out as the Republican that I felt he was at that time, telling him, "John, I will help you make a white man's Republican party in the State."

My attitude has always been that this is a white man's country, and that the negro, no more than the Japanese, the Chinese, or any other race other than the Caucasian, should be of this country except on a basis that they are not our equals, and could never hope to be. Many years ago, when the rice industry was developing in Western Louisiana and in Texas, as president of the Rice Association of America I spoke in that territory, and at that time, as the Government wanted to bring the Japanese in to teach us how to grow rice, in my talks I took the view that we did not want the Japanese in here because it was a white man's country, and no man in any audience that I spoke to wanted the Japanese because his children could not intermarry, and that if we could not raise rice without the intervention of the Japanese, we had better not raise it at all. And, believe me, when I spoke along those lines I struck a sympathetic chord.

Of course, no sensible man assumes for a moment that Mr. Harding purposed to destroy white supremacy, but I will illustrate how the negro problem works out in fact. My son, a man now 35 years of age, with his wife lives in Louisville. His employer happens to be the Lieutenant-Governor of Kentucky, Mr. Ballard, so that, of course, the every predilection would be to vote the Republican ticket. In answer to my inquiry some time ago as to whether my daughter-in-law had registered and voted, she replied: "Yes, we both voted the straight Democratic ticket, but it did not do much good, did it? The negro question here decided me, for the way the Republicans kowtowed to the black race was disgusting." And that is the situation with us down here, and, strange to say, my experience has been that you cannot get a sufficient number of white Republicans in the State of Louisiana

who have the moral courage to come out and say to the negro that we don't want his vote; we don't care to ask him what our laws should be, but that our attitude is to "tell him" and keep him in his place.

With me it is not antipathy to the negro, for I would have none other but colored servants, nor have I had other all of my life, and for a certain character of work the negro is unsurpassed, but just the same I would no more countenance equality from a negro than I would from a Chinese, Japanese, Malay or any other than a race that potentially has not the making of a white American in him.

The foregoing expressions to you I consider warranted in that I am a consistent reader and admirer of the MANUFACTURERS RECORD, and believe that its principles and its teachings are along right lines, and the pity is that more people cannot read your expositions and points of view on many public subject-matters.

### The Liquor Interests, the League of Nations and American Politics.

WALTER JOHNSON, Dallas, Tex.

The revival of the League Covenant now seems to be the procedure of the supporters of the League. There will be the period from the first Monday of December to the 4th of March, 1921, to reconsider the League in some amended form.

The news which is coming from the French Government is to the effect that there will be no demand for destroying the League entirely, but reservations or amendments should be made to the first document and permit it to stand.

Very recently two very notable news notes came through the Associated Press reports. One of those notes was that the Turks had slaughtered about 10,000 more of the Armenians, most of them being civilians. The other news note was to the effect that the former Kaiser of Germany had received in various ways about \$30,000,000 since his sojourn in Holland.

Most of us are aware of the connection and the relations between the former Kaiser and the Turkish noblemen. There is no doubt of the fact that there is a well-financed secret organization which has grown up under the espionage of the former Kaiser and his former adherents which has for its purpose the destruction of Western civilization. The assertion will not be surprising that the liquor interests are very much at work in world affairs, and there is no question that the Reds are being financed from some source, and that source is evidently from the association of the former liquor interests. The former liquor interests have their most substantial friend in the former Kaiser.

The recent World War had one distinct motive in view, which has been mentioned by very few persons. That motive was the destruction of the principles of justice which have grown up from the Christian religion. Our law, our jurisprudence and our court decisions are all based on the 10 simple Commandments. The inalienable rights which are mentioned in the Declaration of Independence may be traced to the Ten Commandments. There can be very little doubt of the idea that the former Kaiser and his adherents, the liquor interests, were attempting to so readjust the governments of Europe by the war that in less than another generation the autocracy of Europe would be able to command America and reinstate the liquor traffic in the United States.

**The sentiment for the World War grew up as prohibition came to be an actual fact. And if one were to make the statement that the former Kaiser is the tool of the liquor interests, such statement would not be incorrect.**

There is no greater mistake being made than that of permitting the former Kaiser to run at large and accept collections for another revolution.

The great contest which is to be staged in the world for the next four years is the contest between the ancient Christian religion and the existence of the governments which have grown from it, and the forces of the liquor interests backing the policy of forcing the United States into a League of Nations which has for its purport the recognition of the caste and slavery of the false principles of heathen religions. The wiping out of the Armenian people was one of the first steps in the contest.

The League Covenant undoubtedly undertakes to place the rites and ceremonies and the practices of the heathen religions on an

equality with the Christian religion. They say "live and let live." The Jehovah of Israel, the One who delivered the Ten Commandments by an audible voice from Mount Sinai, said: "Thou shalt have no other gods before me." When one reads the history of Israel, and how Israel from time to time went astray in undertaking to associate with the heathen religions and the practices of the heathen, such an one must admit that all of the calamities of that nation came for making such associations. There was a time when human sacrifices were enjoined just out of the gates of Jerusalem. What more infamous practice can one imagine? Yet in the face of the twentieth century civilization, which has grown up under the light of the Christian religion and the ancient Israelite, we find several ministers of these nations sitting at Versailles, in conference, purporting to save the world from the destruction of wars by placing on a level with the Christian religion the infamous practices of the heathen. As a matter of fact, the Entente of the recent war was a workable institution, and had the proper military authority, but the League was instituted by some one to supersede the Entente.

Just at this time the liquor interests have a representative in the office of Secretary of State, and if our anticipations are not incorrect the liquor interests are now wanting to dictate the nomination of the Secretary of State to be in the Cabinet of the President-elect.

The Secretary of State dictates the appointment of the foreign ministers who are to represent this nation in all foreign capitals. I say, "Down with the League, and down with the liquor interests!"

The people of the Western nations do not want the League Covenant, and they do not want to guarantee that Rajah So-and-So is to have the moral support of this Government in maintaining his harem intact from external aggression.

**When the President-elect names his Cabinet, give us the history of each member of that Cabinet, especially that of the Secretary of State, and we will be able to see whether the liquor interests are to remain in authority in the management of our foreign ministry. Any person who has been an attorney or an agent for the liquor interests is entirely unfitted for any of those positions. We do not want any person appointed to a ministry who has been unalterably in favor of the League covenant.**

The Association of Nations which is to be presented for approval should be a policy with the moral support of the United States behind it. That association should not be made with any Government until such Government will write into a constitution the basic principles of this Government. The basic principles of that association should be: First, the recognition of Jehovah; second, the establishment of a representative legislative body holding the sovereignty of the nation; third, the equality of men and women, social and political; and fourth, the separation of Church and State. That sort of an institution will live and grow to a world power, and it will not determine in advance what those legislative bodies will be compelled to do.

### Sees Need for Spirit of Christian Religion in Industry.

Chicago, November 10—[Special.]—"Edmonds is right," declared Bishop Thomas Nicholson in a recent address at the twenty-fifth anniversary service of the St. James M. E. Church in Chicago. He was commenting upon an editorial appearing a few weeks ago in the MANUFACTURERS RECORD, in which the statement was made that what industry needs is more of the old-fashioned Wednesday-night prayer-meeting religious spirit.

Bishop Nicholson referred at various times in his address to the MANUFACTURERS RECORD editorial, and, indeed, pitched his whole sermon upon the same key.

It was his assertion that capital and labor cannot solve their problems by the spirit of grasping, on the one hand, and a lack of service, on the other. It will be necessary for both sides in industry to develop a greater desire for mutual service to the other fellow. This concession will not be possible unless both sides are actuated by the spirit of the Christian religion.

The bank clearings of Charlotte, N. C., last week amounted to \$13,191,779.19, the largest on record, and \$5,000,000 more than the previous week.



# THE IRON AND STEEL SITUATION

## All Operations Now Influenced by Readjustments Under Way.

Pittsburgh, Pa., November 22—[Special.]—There has been a sharp decrease in the rate of production at many of the independent steel mills. At least half, probably, of the independents are operating at 60 per cent or less of their rate last September, although even then, on account of coke shortage and transportation difficulties, they were not operating full. Few, if any, independents are operating at within 90 per cent of their recent rate. The Steel Corporation is operating, on the whole, approximately as well as at any time since March, and some of the Corporation plants are turning out larger tonnages than formerly. It is needless to say that shipments are fully equal to production. No blast furnace or mill is disposed to accumulate any material at a time like this, and all are endeavoring to reduce their stocks of semi-finished and finished products to the minimum. Everything is being gotten ready for the vacation the iron and steel industry will have to take waiting for the country to readjust itself to a basis that will invite investors to take hold and engage in works of permanent construction, for which normally one-half or more of the steel produced is used.

The sudden ending of pressure upon the independent mills for deliveries and the continuance of substantially full activity by the United States Steel Corporation is the natural result of the price conditions that have ruled for approximately a year, the independents seeking high prices, commensurate with the scarcity of steel and the needs of buyers, and the Steel Corporation holding its prices steadily at the Industrial Board schedule of March 21, 1919, despite almost constantly increasing costs. Contracts were made with the Steel Corporation for deliveries far ahead, while purchases from the independents were only for early deliveries. Many buyers overestimated their requirements, not counting upon the slowing down in industry occurring so soon, and these have been cancelling contracts or instructing the sellers to cease or curtail shipments. There has been a fresh wave of that sort of thing in the past week or two. Independent mills that were claiming only recently they were sold up to the end of the year find that with the altered conditions they do well if they operate at 50 or 60 per cent.

### Iron and Steel Industry Sound Financially.

When banks are calling upon speculators in high-priced commodities to unload and pay up, causing loss of much of the profit previously made, and when the statistics of business failures show continued increases the very sound financial condition of the iron and steel industry is worthy of notice. There is nothing remarkable about the condition, however, since it is the natural outcome of the industry's method of doing business, which for more than a generation has been the cash method. Two or three generations ago everything was done on a time basis. A four months' accommodation was the start, the buyer frequently requiring a partial extension when his regular four months expired. Of late the terms have been 30 days, with a small discount for cash, and a buyer who did not discount was regarded as one to be watched. Neither the steel producers nor their customers have had to seek banking accommodations to any extent. Furthermore, since steel was scarce for so long there have been no large accumulations of steel in consumers' or distributors' hands, and the steel accumulated at mill during the period of car shortage was carried by mills without difficulty.

### Inflated and Pre-War Prices.

The iron and steel producers have nursed no delusions as to inflated prices being permanently fastened upon the country. When in the past year they have asked high prices they referred to their high costs, but did not deny that they were adding large profits to those costs, and they did not pretend that the high costs would necessarily be permanent. The merchant blast furnace man, for instance, pointed out to his customers the extremely high market price of coke. There was nothing to do but pay the price for coke, if deliveries on contract were insufficient, and the pig-iron buyer had to foot the bill. Now the condition is different. Buyers of pig-iron and steel products will determine, to

a great extent, the prices they will pay, and profits will have to be telescoped. The pig-iron buyer will not be willing to pay a high price for pig-iron on the ground that the furnaceman is making little or any profit, if the furnaceman, in turn, is paying a large profit to the coke producer. The coke producer will have to come down to a moderate level. The Connellsville coke operators have not come down enough yet, but the furnacemen have formed an approximate idea of where the coke price must eventually land, and the situation is simply being allowed to work itself out.

Producers of pig-iron and steel are now thinking in terms of pre-war prices again. It is quite impossible to return to the actual pre-war prices, because certain permanent changes have occurred, but in thinking of prospective prices the producer does not take recent prices and make certain reductions from them. Instead, he takes the pre-war price and makes additions to allow for the increases in costs that are permanent. There are two chief increases that are permanent. One is the advanced freight rates, say 65 to 75 per cent, and the other is the advanced wages. The present wage scale is not necessarily permanent, but reductions at the outside, during the next year, would hardly be more than between 10 and 20 per cent, leaving rates still very much above the pre-war level. As to pig-iron, roughly speaking, it has sold in the forties in the past six or nine months, and it sold in the 'teens before the war, while it will sell in the twenties.

In the telescoping of profits necessary to make cheaper pig-iron coke will have a large part, for it has been selling at tremendous profits, while Lake Superior iron ore will have a small part and perhaps none at all, for ore prices have been quite moderate all along. The ore producer must pay his royalty, which is a fixed sum per ton mined, and then there are high wage rates. Next come rail freights, which are settled, and the lake vessel freight, which may come down a trifle. The season price for Mesaba non-Bessemer ore this year has been \$6.55 per gross ton, or \$1 advance over the 1919 price. The \$6.55 is at Lake Erie dock, after \$1.20 lake freight has been paid and \$1 rail freight from mine to dock at the head of the lakes, leaving \$4.35 as the price per ton realized at mine. The average is about 20 cents a ton less, since the average iron content is below the standard on which the basis price is set, and obviously not a great deal can be cut off \$4.15 when there are royalties and high wages to pay and an allowance for a heavy capital investment. Connellsville furnace coke, on the other hand, while it has declined from \$18 or \$19 last August to \$8 or \$8.50 at present, still has quite a distance to go.

### Steel Prices.

There is so very little activity in the steel market that prices are not well defined. An occasional order of some size may develop, but it is likely to go at an inside price which the seller will not quote openly. The independents still have some business on books which they try to protect against cancellation, and to quote reduced prices openly would undermine this business. Thus, in general, the independent market has declined but little from the recent level and is still well above the Steel Corporation prices, but it is largely a nominal market.

Late last week Chairman Gary of the Steel Corporation made an important statement, saying that the Corporation had adhered to the Industrial Board prices of March 21, 1919, although there had been large increases in costs which would have justified advances, including a large wage advance and the freight advances of last August. The presidents of the subsidiary companies had been instructed to adhere to present prices "unless and until it becomes necessary and proper to make changes to meet altered conditions." There is a question whether competition of independents would be considered an altered condition. It is improbable that the Corporation would recognize independent competition for some time. Soon the independents will be almost completely run out of business on books, while the Corporation will still have a large tonnage and the Corporation would probably be disposed to let the independents fight it out among themselves. A material decrease in the cost of production would, however, be considered an "altered condition," though how this reduction could come about remains to be seen. The Corporation is self-contained, and has not had high costs through paying large profits to others, as has been the case with the steel works that

buy pig-iron or the merchant furnaces that buy coke. Some of the independents have had special increases in costs because with very high selling prices and unlimited demand they did not have to watch their costs so closely.

#### Pig-Iron Prices.

Pig-iron prices continue to slide off, the decline meeting practically no resistance. On very light buying prices are down this week \$2 on Bessemer and \$1 each on basic and foundry, making the market now quotable at \$40 for Bessemer, \$37.50 for basic and \$39 for foundry f. o. b. valley furnaces, freight to Pittsburgh being \$1.96. The next inquiries will probably bring out further cuts. Even when the market was advancing last August the merchant furnaces did not claim they were sold through the year. Sales have been light since then, and less than six weeks of the year are left, so that it is obvious the order-books have become rather bare.

#### Coal and Coke Output During the Second Week of November.

The weekly report of the United States Geological Survey on the production of bituminous coal shows that the rate of production per working day continued heavy during the second week of November, but the total output for the week was cut down by the celebration of Armistice Day, which, in its effect upon results, seems to have counted for about .7 of a normal working day, being observed in some districts and not in others. The aggregate production of soft coal for the week is estimated at 12,091,000 tons, an increase, as compared with election week, of 671,000 tons, and the daily average made another high mark of 2,120,000 tons. It is remarked that if it had not been for the holiday there would have probably been established a new weekly record for the year.

Production of bituminous coal during the first 270 working days of 1920 shows a total of 476,475,000 tons, as compared with over 409,000,000 tons for the same period of 1919, 514,000,000 tons for 1918 and over 482,000,000 tons for 1917, so that the 1920 output thus far is about 38,000,000 tons behind 1918 up to the same date, but this, notes the report, does not mean a great deal, because in 1918 production exceeded consumption and provided for a net addition to consumers' stocks of more than 30,000,000 tons; neither does it signify much that 1920 is far ahead of 1919, for last year there was a net draft on stocks of 40,000,000 tons, and the close of the year, following the coal strike in November and December, found consumers' stocks dangerously low. But it is more significant to observe that 1920 is now within 6,000,000 tons of the 1917 production, a year in which requirements were large and production about equaled consumption.

The production of anthracite coal during the same week (November 8-13) was more seriously affected by the Armistice Day holiday than was that of soft coal, and the total output for the week is estimated at 1,753,000 tons, little more than the production during the last week of October, when Mitchell Day was celebrated, although it was 338,000 tons more than the production during election week.

The effect of the Armistice Day holiday is displayed by the records of daily car loadings, which on every day during the week excepting November 11 ran well above 6000 cars, but on that particular date the loading was only 1662 cars. But it is noted that there was a prompt resumption of work after each of the three holidays mentioned, viz., Mitchell Day, Election Day and Armistice Day, full quotas of cars being loaded on each of the succeeding days.

The cumulative production of the present hard coal year, it is stated, is now 53,873,000 net tons, as against 57,610,000 tons for 1919, a decrease of nearly 3,750,000 tons, but as the production of 1920 was about 200,000 tons ahead of 1919 prior to the strike of September, and is now 3,750,000 tons behind, there has been a loss since September 1 of nearly 4,000,000 net tons, nearly all of this being caused by the strike and the succession of holidays.

The output of beehive coke during the week of November 13 is estimated at 389,000 net tons, an increase of 4000 tons over the preceding week, or slightly over 1 per cent. This increase was in the States of the Appalachian region, the other States maintaining the output of the week before. Production in the Connells-

ville region is reported by the Connellsville Courier at 201,810 tons, as compared with 201,950 tons the week before. The cumulative production for 1920 stands at 18,462,000 tons, or 1,488,000 tons over the same period of last year.

Dumpings of bituminous coal at Lake Erie ports during the week showed a further decrease, the Ore and Coal Exchange reporting the total handled at 668,950 tons, of which 627,157 tons were cargo coal and 41,793 tons vessel fuel. As compared with the previous week, this was a decrease of 180,776 tons.

The cumulative Lake movement of coal from the opening of the season is now 21,562,000 net tons, and as compared with 1918 (two years ago) this year is still about 7,250,000 tons behind, although, as compared with last year, it is only about 666,000 tons behind, and is rapidly making that up.

#### ACTIVITY IN NORTH CAROLINA COTTON MILLS.

##### Conditions Among Greensboro Plants Not Seriously Affected by General Slump—Some Mills Making Important Improvements.

Greensboro, N. C., November 18—[Special.]—The majority of the cotton mills here have not been seriously affected by the slump in business, and there is no general talk as yet of curtailing production or reducing wages.

Only one of them, the Pomona Manufacturing Co., is curtailing production, and it is not doing so to any marked extent. This company has been producing yarn in excess of its own weaving needs, selling the surplus. On account of the stagnation of the market, this mill is not now producing its excess of yarn, and is operating its carding and spinning departments four days, which furnishes enough yarn to operate the weaving department full time. C. W. Causey, secretary and treasurer of the Pomona Mills, stated that orders on hand would provide for the full-time operation of the looms of the mill for the rest of the year, and that no plans had been made for curtailment after that date.

Notices have been posted at the Pomona Mill announcing that wages will be reduced 20 per cent beginning Monday, November 22. Mr. Causey said today that the employees of the mill seemed to have accepted the announcement philosophically, and that there appears to be no marked dissatisfaction. The market for cotton goods is very dull, according to Mr. Causey, and that is the reason for what curtailment has been done and for the decision to reduce wages. He thinks that it will be a matter of months before the market conditions are stabilized. This mill is a 25,000-spindle affair, and employs about 550 operatives producing fancy goods.

The White Oak Mills, the largest manufacturer of denims in the world, have not curtailed production nor cut wages. The Proximity Print Works are also running full time and have not reduced wages. The Revolution Mills are running full time and have not reduced wages. Proximity buys cloth from a group of South Carolina mills and converts it into prints. Improvements and additions totaling an expenditure of about \$1,000,000 are being made at Proximity Mills. A new dyehouse is being built, a new residence for the superintendent and several new bungalows for the operatives. Some new boilers are being installed. At White Oak Mills the installation of 1000 new Draper looms is going forward, about half of them already having been put in. The remainder will probably be installed by January 1.

The Blue Bell overall plant here is running three days a week, with a reduced force of employees. However, an addition to the plant, which will be completed soon, is being made despite market conditions, and when it is completed the company expects to run the entire plant full time. The management reports improvement in business lately, orders having been received the past week for delivery by express, indicating that some retailers are finding their shelves getting bare.

#### Accuracy of Forecasts.

LEWIS T. RANTER, Washington, D. C.—I congratulate you on the accuracy of your forecast of the events of the last few years and the power with which you have stated the reasons for the conclusions reached by you. The whole South is indebted to you for the intelligent and patriotic editorials of the MANUFACTURERS RECORD during the last four years.

# LUMBER AND BUILDING MATERIALS

## Superheated Steam Used in Kiln-Drying.

Washington, D. C., November 13—[Special.]—A kiln-dry process which will dry one-inch softwood lumber, green from the saw, to 10 per cent moisture content in 24 hours or less has been developed by the United States Forest Products Laboratory at Madison, Wis. It consists in forcing superheated steam at high velocity first one way and then in the opposite direction through the pile of lumber in the kiln. This treatment dries the lumber very uniformly and rapidly with a minimum of checking and warping. Drying lumber by this process consumes more steam per thousand feet of lumber than ordinary drykiln processes; it somewhat reduces the toughness of the lumber, and cannot be used in thicknesses of more than two inches. It is suited to Douglas fir, Western hemlock, white cedars, sugar pine and both Western and Southern yellow pine, but not to some softwoods on account of collapse.

## Tulsa Building Enterprises Going Rapidly Forward.

Tulsa, Okla., November 18—[Special.]—Building projects now under way here will insure considerable activity throughout 1921. An electric generating plant for the Public Service Co. is fast nearing completion at a cost of \$1,000,000, and transmission lines are being extended over an enlarged area. In the southeastern part of the city a \$1,500,000 hospital is being erected. The contract for the erection of a Masonic temple to cost \$600,000 has just been awarded. Bids have been asked for additions to the high school to cost \$500,000. A new M. E. college will be located here, and a committee is now at work making a survey preliminary to selecting a site. A fund of \$1,000,000 has been provided for the purpose.

Considerable progress is being made in the development of a portion of coal land adjacent to the city by the Leavall Coal Co. The company was recently organized by local business men and \$250,000 secured to finance operations.

A large number of new mercantile establishments have recently located in the city, and, judging from the number of inquiries received by the Chamber of Commerce, the next 12 months will see the largest additions to the industrial, commercial and mercantile circles in the city's history.

## Solving Housing Problem in England.

New York, N. Y., November 13, 1920—[Special.]—The action taken by the municipal authorities in Great Britain toward providing new houses for British working people at low rentals is indicated by statistics obtained by Foreign Information Department of the Bankers' Trust Co. of New York.

In the following table are given construction costs and rentals of new houses which have been built under the recent Housing Act by various English towns and cities:

BRITISH WORKINGMEN'S HOUSES.

	Cost,* Pounds.	Rent, Shillings† per week.
York .....	918 to 1017	10 to 13
Birmingham .....	Not given	15 to 17
Leeds .....	697 to 732	9 to 11
Walsall .....	956	11
Dewsbury .....	950	8½
Doncaster .....	850 to 1046	10½ to 13½
Wolverhampton .....	750 to 850	8 to 9
Tenbridge .....	868 to 938½	8½ to 9½

\*£ = about \$3.37. †Shillings = about 17 cents.  
‡Recent wage increases to be added.

The above rentals, except in the case of Birmingham, do not include the local tax rates, but an indication of the amount the rates will add to the weekly rents is furnished by the higher rents charged in Birmingham. The lower-priced houses are without parlors.

The erection of concrete houses is gaining because of the lack of sufficient bricklayers in the building trades.

Edinburgh has given a contract for the construction of 306 concrete houses at a cost of £406,246. This is estimated to be £24,000 cheaper than the cost of building the same number of brick houses, because much of the work will be done by unskilled labor.

## Additions to Dallas Cement Mill.

The Texas Portland Cement Co., Dallas, Tex., who have recently doubled the capacity of their Houston mill, writes to the MANUFACTURERS RECORD that plans have now been prepared and work begun on the installation at its Dallas mill of one new 8x9x220-foot kiln, together with the additional raw mill machinery and other construction necessary for the increased output.

## Building Activity Revived in Mexico.

Guaymas, Mexico, November 15—[Special.]—Large importations of lumber, both by rail and steamship, are coming into this port. Other building materials are also arriving, and these, with the lumber, are being distributed throughout the Pacific Coast region of Mexico to supply the shortage that has existed for several years. It is stated that prospects were never brighter for a wonderful increase of building activities in Guaymas and many of the other towns of the Pacific Coast region, especially along the line of the Southern Pacific Railroad of Mexico. Many new business houses, manufacturing plants, ranch buildings and other improvements are planned. Mine props and other materials for mines are also being shipped into this part of the country in large quantities.

## Building Activities at Canton, Miss.

Canton, Miss., November 20—[Special.]—Building operations in Canton and Madison county, hindered somewhat from 1917 to 1919 because of war conditions, have in the last twelve months been resumed on an extensive scale. Many new structures, business houses, residences and various enterprises have sprung up in this county during that time, indicating the prosperous condition of this section of the South.

The Madison County Sweet Potato Curing and Storage Co., capitalized at \$20,000, of which nearly half is owned by farmers, has just been completed. Its capacity is 20,000 bushels, and ample provisions were made for easy extension should it be necessary. A new laundry, incorporated at \$17,500, and owned by Centonians, has just started operations. The Madison County Bank, including \$125,000 capital, was organized in February, and is the third for Canton.

Other buildings included gins, groceries, a \$20,000 new warehouse for Cole Bros. & Fox, wholesale grocers, many residences, and improvements in brick and wood on present establishments.

## Report on Southern Lumber Mills.

New Orleans, La., November 17—[Special.]—For the week ending November 12 reports of the Southern Pine Association on the activities of 142 lumber mills in the South are as follows:

	Cars.	Feet.
Orders on hand beginning of week.....	10,238	223,608,158
Orders received during week.....	2,564	56,000,324
Total.....	12,802	279,608,482
Shipments during week.....	2,532	55,301,412
Orders on hand end of week.....	10,270	224,307,070
	Total Feet.	
Orders .....	6,000,324	
Shipments .....	55,301,412	
Production .....	54,351,962	
Normal production of these mills.....	88,258,630	

Shipments exceeded production for the week by 1.75 per cent, while orders exceeded production by 3.03 per cent and orders exceeded shipments by 1.26 per cent.

The production was 38.42 per cent below normal. Shipments were 37.34 per cent below normal production and orders were 36.55 per cent below normal production. The increase in "orders on hand" during the week amounted to 31 per cent.

A meeting at Dallas, Tex., of the officials of the Texas Farm Bureau Federation and the Texas Division of the American Cotton Association has resulted in their consolidation. The new organization becomes the Cotton Division of the Texas Farm Bureau.



## Motor Trucks Widely Used About Mills.

New Orleans, La., November 17.—[Special.]—The motor truck is playing a vastly more important part each year in getting the production of portable sawmills to railroad loading points. Millions of feet of lumber and timber are being handled by automobile trucks, operating alone and with trailers. Tractors are likewise playing an important part in logging and mill operations.

## Reduced Prices Announced by Roofing Manufacturer.

Substantial price reductions, ranging from 24 to 31 per cent, and effective November 16, have been announced by the Flintkote Company, Inc., of Boston. This concern manufactures asphalt shingles and prepared roofing. It operates four plants, and is affiliated with several others, and distributes to all parts of the country east of the Rocky Mountains.

## \$900,000 Masonic Temple Building for Oklahoma City.

Oklahoma City, Okla., November 22.—[Special.]—Plans have been approved for erection of a Masonic Temple building at 6th St. and Robinson Ave. to cost \$900,000. This will be one of the finest buildings in the city and one of the finest Masonic temples in the southwest. Ground will be broken for the new structure as soon as weather conditions permit.

## Huntington Seeks Solution of Housing Problem.

Huntington, W. Va., November 19.—[Special.]—Local business men have renewed their attack on the housing problem, and a survey of the city is now being made to determine how many dwellings it will be possible to construct during the coming year. It is said that pledges have already been received insuring the erection of 72 new houses.

According to the chairman of the industries committee, 1000 houses are actually needed, in view of the large number of new industries locating in the section. Practically every plant here will be kept running full time for an indefinite period, it is stated, and nearby towns are just as busy. There is renewed activity throughout the section.

## Manufacturing Plants of West Virginia Show No Lessening of Activity.

Charleston, W. Va., November 10.—[Special.]—A brief survey of business conditions in the Kanawha Valley of West Virginia and in other parts of the State, while disclosing the fact that buying is restricted on the part of jobbers and retailers to immediate needs, shows no cessation of operations at manufacturing plants. Orders at most of the plants in the Kanawha Valley are such as to keep them in operation for some time. While buying is not on so large a scale, and although buyers in many lines seem to be pursuing a game of watchful waiting, yet the general dullness has not reached a point where orders are so lacking as to make it necessary for any plants to retrench in operations.

## House-Building by Municipalities in England.

New York, November 20.—[Special.]—News has been received here of the successful operation in England of municipal house-building for working people. Many cities are engaged in construction progress, and homes already completed are being rented at prices far below those paid for privately-owned dwellings.

The price of construction varies from \$2250 in Leeds to \$3500 in Doncaster, the type of the houses being very much the same, except the least expensive ones are without parlors. They are cottages, many of them of brick, although concrete is the most popular material at present.

The municipality-owned cottages rent for from \$5.50 to \$12 a month, the higher prices prevailing in cities like Birmingham. No figures are available on the total number of houses built by various municipalities, but nearly every town of consequence on the island has gone into the construction business.

## Planning Birmingham District Cement Works.

Information originating at Birmingham states that the Lehigh Portland Cement Co. of Allentown, Pa., has determined to build a \$3,000,000 plant with annual capacity of 1,000,000 barrels of Portland cement in that district. It is stated that a \$200,000 site, including 250 acres of limestone land, has been purchased, but the company writes to the MANUFACTURERS RECORD that no definite plans have been decided upon in connection with this proposition.

## Forestry Bill Ready for Congress.

Washington, D. C., November 22.—[Special.]—When Congress meets in December there will be ready for introduction a bill for a national forest policy and for better fire protection. An agreement by all interested regarding this legislation marks a great forward step in the forest industries program, and every industry that uses wood in this country is affected. The bill was prepared by representatives of the American Newspaper Publishers' Association, the American Paper and Pulp Association, United States Forest Service, Chamber of Commerce of the United States, American Forest Association, National Wholesale Lumber Dealers' Association, National Lumber Manufacturers' Association, Western Forestry and Conservation Association, and the Association of Wood-Using Industries.

The primary provisions are twofold: For a considerable extension of direct Federal activity in forest ownership and production, and for the development with Federal aid and encouragement of such systematic policies in the several forested States as being consistent with local conditions will bring about adequate forest protection and reproduction in the interest of these States and the general public.

It provides specifically through co-operation between the Government, the States and the owners of timberlands for adequate protection against forest fires, for reforestation of denuded lands, for obtaining essential information in regard to timber and timberlands, and for other steps essential to the continuous forest production on lands suitable for the purpose.

The bill also provides for the appropriation by Congress of \$10,000,000 yearly for five years for purchasing lands to be added to the national forest system. The purchases will not be restricted, as heretofore, to land in the drainage basins of navigable streams.

## Lumber Notes.

The Architectural and Building Code Service, National Lumber Manufacturers' Association of Chicago, has recently published a bound volume containing a series of plates of "Frame Construction Details." These have been prepared in 8½x11-inch size for the purpose of handy reference and convenience in filing. Copies may be secured at a cost of \$1 from the association at 750 McCormick Building, Chicago.

The sawmill and planing mill of the Fernwood Lumber Co. at Fernwood, Miss., which was closed down about the middle of October, resumed operations on November 8 and is now working day and night. With the exception of shutdowns for general overhauling, this plant has been operating continuously for 22 years.

Reports from Southern pine mills during the past two weeks indicate that the demand for lumber of practically all kinds has greatly increased. Many of the mills reported orders in excess of production. Together with the revival of the hardwood industry, these are hopeful signs.

The demand for timber continues good throughout the South, both for hardwood and soft pine, and some mills report more orders for this character of trade than it is possible to handle, largely due to the lack of demand for materials cut from logs after the timber has been secured.

Labor conditions are everywhere improving. Many mills have reduced wages 25 per cent without any great disaffection of labor, and it is hoped that much greater efficiency will be obtained in the near future. A revival of steady business in big volume is looked for a little later on.

## TEXTILE

### Plans of \$1,500,000 Mill Company.

Details have been determined and contracts awarded for the Arkray Mills, Gastonia, N. C., previously incorporated with \$1,500,000 capital by J. L. Gray and J. H. Separk. This company will build for an initial installation of 20,000 spindles and ultimate plant of 40,000 spindles, combed yarn to be the product. The main building will be two stories high, 300x136 feet, with 170x136-foot one-story section; other buildings for picker, shipping, heating and switchboard departments. There will be a 104x50-foot warehouse of four compartments, with opener and press rooms adjoining, all of reinforced concrete. Robert & Co. of Atlanta are the architects-engineers, and the Turner Construction Co. of New York is the contractor.

### \$500,000 Cotton Mills Open at San Antonio.

San Antonio, Tex., November 17—[Special.]—An important event in the industrial progress of San Antonio has just taken place in the opening of the new plant of the San Antonio Cotton Mills. It is expected that the plant will be in full operation by December 1. Cotton duck will be the principal product of the mills. The entire project represents an outlay of over \$500,000. It was financed by J. O. Chapman, Harry Rogers and E. A. Du Bose.

The plant has some novel features which were installed to overcome the dry atmosphere of Southwest Texas. Water sprayed from a humidifying device that atomizes the water and discharges it in the workroom is absorbed by the cotton in process of manufacture, thus making the cotton moist at all times.

Looms used are much larger than those in the average cotton mill. The 60 looms in the San Antonio mill are 60 inches wide, while those of other mills are said to be generally only 30 inches. This equipment makes the plant equal in capacity to those using 130 looms of the 30-inch width.

When in full operation the mill will have a capacity of 40,000 yards of finished fabric weekly. Over 3000 bales of cotton will be consumed each year. About 100 skilled laborers will be employed in the manufacture of the fabrics at the mill. Many skilled men were found in San Antonio who had worked in cotton mills in Mexico, and the factory now has practically all of its employees waiting for the plant to start operating to capacity.

### Present Status of Silk Industry of Florida.

Referring to the present status of plans for his proposed silk industry in Florida, Thomas De Pamphilis, president of the American Silk Industry Co., St. Augustine, writes to the MANUFACTURERS RECORD:

"I have prepared land on which I will immediately plant 25,000 mulberry trees from 7 to 12 feet tall and 50,000 trees of smaller size. I am preparing a nursery large enough to enable me to raise 1,000,000 trees next spring. The trees I am to plant are of the highest quality, and, raised by my process, will produce leaves of a gigantic size. My trees contain the following varieties: Black English, Russian morus, Italian gelso, French morus and muticaulis. My secret process of feeding the silkworms on wet leaves has given a success which has surpassed my expectations. As published in your magazine on March 25, from now on it is safe to feed the silkworms with wet leaves without running the risk of losing the crop. In a few weeks I am leaving for Italy to purchase machinery and other articles in order to operate on a large scale. While in Italy my son, Walter De Pamphilis, who is already an expert on silk culture, will take charge here for erection of a large factory in which there will be room enough for machinery, display-room and sufficient space to raise 10,000 pounds of silk cocoons per crop. The factory will be ready to operate during March, when I expect to come back from Italy. A number of Italian people, with a thorough knowledge of the silk industry, are already engaged to handle the large amount of work next spring. On my return from Italy I will prepare a complete statement for the MANUFACTURERS RECORD of the work I have done, the success attained and my plans for the future."

### Baltimore Swiss Embroidered Novelties Mill.

From 120 to 150 operatives are now employed by the Lion Brothers Company, Baltimore, which recently completed its two-story 80x58-foot concrete and brick addition costing \$110,000. In this structure has been installed an automatic Schiffli 10-yard embroidery machine, costing \$50,000, built by Adolph Saurer, Inc., Arbon, Switzerland. The Price Construction Co. was the building contractor, and Smith & May were the architects.

### Addition to Union Mill, Lafayette, Ga.

The Consolidated Textile Corporation of Greensboro, N. C., is making a small addition to its Union Mill, Lafayette, Ga., by adding engine-room and machine shop, the building to cost about \$15,000, contract for which has been given to the West Point Iron Works, West Point, Ga. Auxiliary engine and complementary equipment costing \$15,000 will be installed, contract for the engine having been awarded to the Skinner Engine Co., Erie, Pa. Plans and specifications are by J. E. Sirrine & Co., Greenville, S. C. Work will be completed in 60 days.

### Textile Mill Notes.

An increase of capital from \$800,000 to \$1,000,000 has been announced for the Newberry (S. C.) Cotton Mills.

The Oakland Cotton Mills, Columbia, S. C., will increase capital from \$400,000 to \$500,000.

Capital has been increased from \$500,000 to \$750,000 by the Mollohon Cotton Mills of Newberry, S. C.

### Building of Two More Roads Authorized.

Burgaw, N. C., Nov. 19—[Special.]—The Pender County Commissioners have approved the proposed construction of the Wilmington-Fayetteville road and the Wilmington-New Bern road, both roads running across the county, the former about 20 miles in the length and the latter 15 miles. The sum of \$67,000 is appropriated for the construction of the Wilmington-Fayetteville road and \$36,000 for the Wilmington-New Bern road. Both projects will be supplemented with Federal aid.

### Urging Special Session of Kentucky Legislature to Pass on Good Roads Bond Issue.

Frankfort, Ky., November 16—[Special.]—Organizations headed by the Louisville Automobile Club, a body with 2500 members, are urging upon the Governor the advisability of calling a special session of the Assembly to consider authorizing a vote on a \$50,000,000 bond issue for roads. Lieutenant-Governor Ballard advocates the raising of the larger part of this road-improvement fund by special taxes on coal and oil. He recommends a tax of 10 cents a ton on coal, which would produce about \$3,000,000 annually, also a specific oil tax.

The next regular session of the Kentucky Assembly is not scheduled until January, 1922. Governor Morrow has indicated that if a special session is called it will depend upon the demand developed.

### Personal Mention.

G. R. Meyercord has been nominated for the presidency of the Illinois Manufacturers' Association, and this is tantamount to his election. Mr. Meyercord is the organizer of the Vitrolite Co. of Parkersburg, W. Va., which is only one of his varied manufacturing activities. Mr. Meyercord has been very active in the work of the Illinois Manufacturers' Association, being at present first vice-president, a director and chairman of the foreign trade committee. He is 45 years old.

H. S. Mulliken of Lexington, Mass., has been appointed metallurgical engineer of the Bureau of Mines, and has been assigned by Dr. F. G. Cottrell, the director, as an assistant to him in special professional work connected with the bureau. Mr. Mulliken is a graduate of the Worcester Polytechnic Institute, Worcester, Mass., and has been variously connected with mining and metallurgical enterprises in South America and Mexico.

## RAILROADS

### Chesapeake & Ohio Financing.

The Chesapeake & Ohio Railway Co., says a report from Washington, has applied to the Interstate Commerce Commission for authority to issue its capital stock to a total of \$50,225,000, to be issued from time to time until April 1, 1936, for the conversion of an issue of 5 per cent gold bonds maturing in 1946 for the same total amount.

### St. Louis Street-Railway Certificates.

Under an order of court Rolla Wells, receiver of the United Railways of St. Louis, has been authorized to sell \$4,200,000 of receiver's certificates, dated October 1, 1920, at 98.48 to the Wm. R. Compton Company, the First National Bank, the Mercantile Trust Co., the Mississippi Valley Trust Co. and Francis Brothers & Co., all of St. Louis; the Mercantile Trust & Deposit Co. of Baltimore, and the Guaranty Trust Co. of New York. It is further stated that under the contract the syndicate will receive a commission of 4 per cent. Of the aggregate, \$2,000,000 of certificates must be delivered by November 30 and must be issued in exchange for bonds of the St. Louis Railroad Co., amounting to \$1,900,000, which are overdue. The Missouri Public Service Commission has approved the issue of certificates. Some time ago the court, it is stated, authorized their sale, but the time limit expired before a contract could be concluded.

### Inequality in Freight Rates.

A. M. Sheperd, vice-president and general manager of the Tennessee Paper Mills, Inc., Chattanooga, Tenn., in a letter to the MANUFACTURERS RECORD, says:

"As I see the South today, one of the great needs is a more equitable freight rate, one that will be in line with the rates charged for a like service north of the Ohio River.

"We are planning an addition to our plant, which will mean an investment of close to \$750,000, but before we do anything we must have assurances from the railroads of fair treatment. Just to show you one case of unfair treatment of industry in the South: We are shipping Kraft wood pulp from Savannah to Chattanooga; the rate before the recent advance was 25½ cents, and the same article was carried to Cincinnati for 22½ cents. This enables the mills north of the river to build up and grow at the expense of our plants here in the South. We don't want any advantage, only an equal chance. I am strong for the South, but don't feel we should be taxed to do business here."

### Governor Cornwell Elected a B. & O. Director.

At the annual meeting of the Baltimore & Ohio Railroad Co., held last week in Baltimore, the directors were re-elected with the addition of Hon. John J. Cornwell, Governor of West Virginia, to fill the vacancy caused by the death of J. G. Schmidlapp, which occurred in December, 1919. It is understood that Governor Cornwell will not qualify as a director until after the end of his term as Governor, which is on March 4, 1921.

The annual report presented was the ninety-fourth in number, and covered the year 1919, and it is summarized thus: "The statement of combined income shows that the total compensation accrued under the contract with the Director-General of Railroads aggregated \$30,035,003, and that there was available from other sources income aggregating \$3,441,088, making the total income from all sources for the year \$33,476,181.80." The fixed charges and corporate expenses, including those of subsidiary companies, were \$23,082,161.55, which, with certain lapover items, made the total deductions from gross corporate income \$24,896,159.31, so that the net corporate income for the year was \$8,580,022.49.

The total operating revenue under Federal control for 1919 was \$182,620,016, an increase of \$7,360,441, as compared with 1918. Total operating expenses were \$169,869,125; increase, \$8,076,613. Net income was \$5,055,991, or \$2,024,822 less than in 1918.

### Georgia & Florida Railway Would Continue Operations.

A statement issued concerning the Georgia & Florida Railway, which is in the hands of receivers, says with reference to the application to the Government for a loan of \$1,700,000 under the Transportation Act:

"A full presentation has been made to the Interstate Commerce Commission, and that body has been satisfied of the security offered and that the Government will be repaid the loan. The question has been asked as to whether there is such a 'national need for this road as to justify the Government in making the loan.' It has been the thought of the receivers making this application that the public need was so manifest and the disaster of abandoning 403 miles of railroad through such a country as this would be so stupendous that the public need needed not to be stressed. It now having developed that there is doubt in the minds of the Commission on this point the receivers propose making an overwhelming showing in order to save the people along this line of road.

"It is appropriate to say that the bondholders would be immediately benefited by having the road scrapped. Its scrap value is estimated at about \$4,000,000. This would net the first mortgage bondholders about 30 per cent. The receivers, however, consider it imperative to their duty to have the interest of the bondholders subordinated to the protection of the public."

The receivers of the Georgia & Florida Railway are W. R. Sullivan, Langbourne M. Williams and J. F. Lewis. The main line runs from Augusta, Ga., to Madison, Fla., 250 miles, and there are branch lines from Keyville to Tennille, Ga., 57 miles; Pendleton to Vidalia, Ga., 44 miles; Nashville to Moultrie, Ga., 34 miles, and Douglas to Relee, Ga., 18 miles. It was formed by purchasing and connecting six small roads, the through line being completed in 1910. Among the other points connected are Millen, Midville, Willacoochie and Valdosta, Ga. The country traversed by these lines has had railroad service for 25 or 30 years. There are 28 towns with population ranging from 400 to 1500 and about 100 stations.

### Line Now Running to Breckenridge, Tex.

Cisco, Tex., November 20—[Special.]—The Cisco & North-eastern Railroad, running from Cisco to Breckenridge, Tex., 32 miles, and which began operations into Breckenridge this week, has been operating from Cisco to Parks Camp, 26 miles, for some time, but has been delayed on getting into Breckenridge on account of difficulties in getting materials for a bridge on the outskirts of the city. This road was financed by Cisco and Breckenridge capital entirely, and taps the Breckenridge oil field, which is now producing 125,000 barrels of oil per day.

Breckenridge, the county-seat of Stephens county, has grown from a village of 2000 inhabitants to a city of over 25,000 in the last two years. At Cisco, a prosperous city of 10,000 people, the road connects with both the Texas & Pacific and the Missouri, Kansas & Texas railroads. An average of more than 600 passengers daily are being handled between Cisco and Breckenridge, besides hundreds of cars of freight.

### The Recent Story of the Railroads.

The address "Reconstruction of Transportation," delivered by Alfred P. Thom of Washington, D. C., general counsel for the Association of Railway Executives, 61 Broadway, New York, before the annual meeting of the Massachusetts Chamber of Commerce at Boston, and which told briefly, but comprehensively, the story of the railroad situation during the period of transfer of the lines from public to private control, has been published in pamphlet form for reference, as well as for the use of interested individuals who have hitherto read nothing concerning it excepting abbreviated press reports. It was reprinted by the association.

### Traveling Freight Agent Appointed.

J. C. Spencer has been appointed traveling freight agent for the Central of Georgia Railway, with headquarters at 1324-25 Graham Building, Jacksonville, Fla., to succeed L. G. Branham, who resigned to go with another line.



### To Consider the Street-Railway Situation.

Washington, D. C., November 24—[Special.]—A referendum vote on proposals for improvement of the situation of the country's street railway lines was asked today of the membership of the Chamber of Commerce of the United States. The recommendations on which the ballot will be cast are advanced by this organization's committee on public utilities. They are eight in number and read:

1. Existing traction facilities should be conserved.
2. The attitude now taken toward street railway problems should be based upon the present and future needs of the community.
3. The attitude which is taken toward street railway problems should contemplate private ownership and operation.
4. Regulation should everywhere be instituted that will promptly follow changes in the situation of the companies rendering services of local transportation.
5. Provision should be made against the consequences of unfair competition.
6. All burdens unrelated to the service performed should be removed from street railways.
7. Official responsibility should be definitely fixed for the application of regulation.
8. Each company should seek to have available for the public at all times the facts as to the results of operation and should have resident responsible executive wholly conversant with local requirements.

This is the thirty-third referendum taken of the Chamber's membership. The referendum method is used by the Chamber as a means of obtaining the consensus of business opinion on public questions. With each ballot put out there goes the report of the committee making the recommendations.

In this committee's report it is stated that the Federal Commission found that the electric railway industry is without financial credit and is not performing properly its public function. The Commission concludes that the first essential is to restore credit to the street railways in order that they obtain necessary new capital for the extension and improvement of service. In this finding and conclusion the committee concurs, and it recommends that as the first step in bringing about this result existing traction facilities should be conserved. The attitude taken toward them by the public must be constructive and not destructive.

"The problem," says the report, "should be approached from the point of view of the value of the property used for the public service rather than from the point of view of the outstanding securities. If it be conceded that the public interest is to obtain good service at lowest cost, and that street railways are essential and necessary, then the sensible way to deal with the problem is to permit existing organizations and present properties to earn a sufficient sum over their operating expense to induce investment of capital for extensions and improvements to existing facilities.

"A canvas of every consideration brought forward in support of public ownership has resulted in the committee's finding in it no solution for present problems or means for meeting future requirements. The committee accordingly recommends that the attitude which is taken toward street railway problems should contemplate private ownership and operation.

"Regulation is recognized as a necessary corollary to private ownership and operation."

### Higher Rates for West Virginia Local Travel.

Charleston, W. Va., November 20—[Special.]—Under the decision of the West Virginia Public Service Commission, announced this week, eight railway companies operating in West Virginia have been authorized to increase their intrastate passenger rates 20 per cent where the present rate does not exceed three cents a mile. By this decision the rates in this State are put on a par with those recently granted on interstate traffic by the Interstate Commerce Commission. The increases are not to go into effect before November 28. Railroads which will secure the benefit of the increase are: The Baltimore & Ohio, Pittsburgh, Cincinnati & St. Louis, the Western Maryland, the Monongahela, the Chesapeake & Ohio, the Kanawha & Michigan, the Norfolk & Western and the Virginian lines.

### New Equipment.

Louisville & Nashville Railroad is reported in the market for 16 locomotives of the light Mikado type, the Western Maryland Railroad for 100 steel hopper car bodies of 55 tons capacity, and the Kansas City, Clay County & St. Joseph Railway for 5 freight cars.

### Eight-Coupled Engine for Industrial Service.

Two locomotives constructed for the Cambria Steel Co. by the Baldwin Locomotive Works are of more than usual interest. They are of the eight-coupled type, simple and strong. In this type the total wheelbase of the engine alone is 16 feet and the locomotive operates on maximum grades of 1½ per cent, combined with curves of 12 degrees, although it is capable of traversing curves as sharp as 24 degrees.

These locomotives are notable because of their high capacity; they exert a tractive force of 68,000 pounds, which has not been exceeded thus far by any other eight-coupled non-articulated locomotive completed by the builders. The engines, which are of standard gauge, are used on rails weighing 85 to 100 pounds per yard.

The boiler is equipped with a wide firebox and superheater, and has the unusual diameter, for a switching locomotive, of 86 inches. The weight on driving-wheels is 70,000 pounds. Engine and tender together weigh 425,000 pounds. Walschuerts valve motion is used and is controlled by a power-operated reverse. The cylinders are 27x30 inches and the driving-wheels are 53 inches in diameter. Working steam pressure, 205 pounds. The height and width of the locomotives, which are limited to the Pennsylvania Railroad clearance, are, respectively, 14 feet 8¾ inches and 10 feet 2 inches. There are four sandboxes, two right and two left, and the bell is mounted on the round of the boiler on the left-hand side.

These locomotives are capable of handling about 2000 tons of cars and loading on a grade of 1 per cent, and are suitable for the heaviest class of industrial switching service where tracks are permanently laid and of substantial construction. Locomotives of similar type, but preferably lighter in weight, can also be used to advantage in heavy contracting service.



LARGE SWITCHING LOCOMOTIVE FOR INDUSTRIAL SERVICE.

## MECHANICAL

### Pneumatic Unloading of Copra.

Although on the other side of the Atlantic about 60 per cent of the work of unloading grain and similar bulk material is done with pneumatic conveyors, there have been, until recently, comparatively few large installations in the United States. High labor costs, however, are stimulating increasingly careful attention to the possibilities of increased speed of unloading vessels and reducing the number of men required. The accompanying photographs show the pioneer pneumatic unloader at the harbor of San Francisco for discharging cargoes of copra or dried coconut meat.

A large tonnage of copra enters this port each season from the South Sea Islands, in sailing vessels of 1300 to 1500 tons. The copra is packed in the holds of the vessels well up under the deck, and it has been the practice to unload it by the ships' tackle and tubs. Vessels have been unloaded at the average rate of 25 tons per hour with 20 men. The accompanying picture shows a typical copra vessel at Parr Terminal, Oakland, Cal., with the unloader at work, the two suction legs reaching up from the hatch, thence to the separator tank, from which the copra is dropped through an air-lock gate to the exhaust pipe of the blower, which spouts it into either end of the car.

This unloader has now been in operation more than two months, and is giving a very satisfactory performance. It has an unloading capacity of from 30 to 40 tons per hour; two men are required at each nozzle and another man attends to the machinery and directs the loading of the cars. One unexpected advantage is the more efficient loading of the cars. The material leaves the loading spout at high velocity and is thrown to the farthest corners, packing the car from floor to ceiling, so that while with manual labor the car usually received 15 or 20 tons of copra, it is now loaded to its full carrying capacity. The copra contains considerable dust, vermin, etc., which may be automatically separated in the vacuum tank. The flexible hose is 8 inches in diameter. Automatic cut-outs are installed to stop the machinery in the event of choking due to foreign material.

The illustration was furnished by the Guarantee Construction Co., New York, the engineers and contractors for the equipment.

## FOREIGN NEEDS

[The MANUFACTURERS RECORD receives many letters from abroad asking for information about American goods, and others, from men who wish to represent American houses. Without assuming any responsibility for these concerns, we publish a summary of the foreign letters of inquiry from week to week.]

### Bag-Making Machinery.

ANTONINE AURENGO, Pelissanne, B.-Du-Rh., France.—I will be very much obliged if you will put me in touch with some firms who make machinery for bags and awnings, such as machines for whipping bags, hemming bags, picking bags and awnings, cleaning, filling and turning bags, darning and repairing bags, marking and printing bags. The above articles interest me on the express condition that offers, price and conditions of sale and time delay of delivery are furnished to me in French.

### Machines for Laces, Buttons, Etc.

MARIANO BOTEHOLO, Parahyba do Norte, Brazil.—In a few months I intend to purchase a few machines for the manufacturing of laces and jets (Rendas and Bicos are too expensive, and I would advise you to send samples) or embroidery; these machines to be operated by hand; also wish to secure several machines for the manufacture of buttons made of bone. I trust that I may be favored with catalogs, prices and any other information concerning these articles. I am interested in representation of articles made of silk in general, and also in hardware. Correspondence in Portuguese suggested.

### General Merchandise.

S. WALDER, LTD., Sydney, N. S. W., Australia.—We are very anxious to get in touch with manufacturers and distributors of the products of your country. We prefer to do business with manufacturers who are desirous of placing their goods on sole-agency basis for Australia. We import: Cotton ducks; calico tickings—canvas and piece goods; yarns—wraps, threads, etc.; cordage, twines, ropes, cords—elastic and fabric webbing; jute piece goods; bags—burlap and buckram; oiled silk and waterproof materials for overcoats, etc.; imitation leather; paper, woodpulp—strawboard, vulcanized fiber, etc.; upholsterers' materials—automobile trimmings, hood twill, accessories; woolen piece goods; blankets; toweling; silks; mechanical rubber goods for all uses; builders' ironmongery; enamelware; household ironmongery; general hardware—cutlery, tools, etc.; dyestuffs; heavy chemicals; matches; veneers; cocoa beans; flaxseed; hosiery; down kapok; collar check; steel; iron, and all other items that can be sold in Australia. We export: Cereals, flour, honey, eucalyptus, bacon, eggs, canned fruits and meats, cheese, butter, dried fruits, hides, skins, furs, wines and all other Australasian products.



UNLOADING COPRA FROM VESSEL AND LOADING INTO CAR.

# Construction Department

## EXPLANATORY.

The MANUFACTURERS RECORD seeks to verify and obtain additional information regarding all enterprises reported in its Construction Department, by direct daily correspondence. Further facts of news value are published later from telegraph, mail and representatives' reports. We appreciate having our attention called to errors that may occur.

## DAILY BULLETIN.

The Daily Bulletin of the MANUFACTURERS RECORD is published every business day in order to give the earliest possible news about new industrial, commercial, building, railroad and financial enterprises organized in the South and Southwest. It is invaluable to manufacturers, contractors, engineers and all others who want to get in touch at the earliest moment with new undertakings, or the enlargement of established enterprises. The subscription price is \$20.00 per year.

## Bridges, Culverts and Viaducts.

Ala., Montgomery.—State Highway Dept. of Alabama; build \$175,000 bridge over Tallapoosa River at Judkins Ferry; 4 steel truss spans with 500-ft. concrete trestle approach; Sartan, Smith & Dobson have contract for substructure and approaches, while Virginia Bridge & Iron Co., Roanoke, Va., have contract for superstructure; L. G. Smith, State Bridge Engr., Montgomery, Ala. (Supersedes recent item.)

Fla., Miami.—City; build bridge over Miami River at Ave. G; double-leaf steel bascule span with piers and embankment approaches; 115 ft. clear span; total length of improvement 495 ft.; 30-ft. roadway, two 6-ft. walks; reinforced concrete bascule piers and retaining walls; bids until Jan. 8; Chas. W. Murray, City Engr., Miami; Harrington, Howard & Ash, Consol. Engrs., Jacksonville, Fla., and 1012 Baltimore Ave., Kansas City, Mo.

Ga., Alamo.—Wheeler County Commrs.; build 4 flat slab bridges and 12 culverts; \$60,000; bids until Nov. 22; Garrett & Slack, Engrs., Montgomery, Ala. (Supersedes recent item. (See Machinery Wanted—Bridge Construction.)

Ga., Atlanta.—Fulton County Commrs.; build concrete arch over Seaboard Air Line Ry.; bids opened Nov. 20.

Ga., Dublin.—Laurens County Commrs.; build bridges and roads; issue \$200,000 bonds.

Miss., Potts Camp.—Marshall County Supervisors, O. H. Wright, Clerk, Holly Springs, Miss.; build 120-ft. span bridge; will invite new bids in spring; rejected previous bids; H. C. Dietzer, State Highway Engr., Jackson, Miss. (Lately noted in-viting bids.)

N. C., Wentworth.—Rockingham County Commrs., Hunter K. Penn., Clk.; build bridges and construct roads; issued \$200,000 bonds.

Okla., Markhams Ferry.—Mayes County Commrs.; defeated bridge bonds. (Lately noted to vote.)

Tex., Austin.—City; build bridge; vote Dec. 12 on \$25,000 bonds. Address The Mayor.

Tex., Houston.—City; build bridges; voted \$425,000 bonds. Address The Mayor. (Lately noted to vote.)

Tex., Corpus Christi.—Nueces County Commrs.; build \$410,000 causeway to connect Corpus Christi with San Patricio County shore of Nueces Bay; length 8156 ft.; 2000 ft. of concrete on concrete piers; 6156 ft. timber; \$300 State and Federal aid; bids opened in December; O. N. Powell, County Engr. Lately noted. (See Machinery Wanted—Bridge Construction.)

Tex., Orange.—Orange County Commrs.; build 690 ft. reinforced concrete bridge, 18 ft. roadway over Adams-Bayou; 60 ft. through girder and concrete trestle approaches; invite bids.

## Canning and Packing Plants.

Ala., Irvington.—Irvington Public Utilities Co. inceptd.; F. W. Bishop, Prest.; Roy Sleep, Secy.-Treas.; L. P. McAllister, Mgr.; erect canning and ice plant.

Ark., Springdale.—Welch Grape Juice Co., J. E. Welch, Westfield, N. Y.; erect \$500,000 fruit-juice plant; 3-story, basement and sub-basement 1000x500-ft. building; brick, stone and concrete construction; plans construction similar factories in or near Springfield, Mo., and other parts of Ozarks; depend upon acreage planted in fruit.

N. C., Hickory.—Home Canner Mfg. Co., E. L. Flowers, Mgr.; rebuild burned plant; building owned by A. A. Whitener.

## Clayworking Plants.

Mo., Independence.—Tiles.—Friderichsen Floor & Wall Tile Co., H. L. Harmon, Prest., 4118 Warwick Blvd., Kansas City; construct 1-story-and-basement factory building; brick and stone; construction by owner. (Lately noted under Kansas City, Mo.)

## Coal Mines and Coke Ovens.

Ky., Alcock.—Carra Fork Coal Co., J. B. Allen, V.-P. and Gen. Mgr., 702 First and City Natl. Bank Bldg., Lexington, Ky.; develop 2400 acres; present daily capacity 200 tons; later increase to 2500 tons; install \$50,000 electrical mch.; purchased. (Supersedes recent item.)

Ky., Barbourville.—Kennesaw Mining Co. inceptd.; capital \$12,000; W. B. Riley, C. C. Smith, C. M. Kelly.

Ky., Cumberland.—Michigan State Grange; purchased coal land; develop.

Ky., Delaware.—Delaware Coal Co. inceptd.; capital \$15,000; T. H. and R. S. Jennings, I. D. Cosby.

Ky., Molus.—Vinson-Kolb Coal Co., Guy Vinson, Prest.; increased capital from \$40,000 to \$100,000.

Ky., Pineville.—Nolansburg Coal Co. incorporated; capital \$40,000; C. and Hattie Hurst, J. C. Buell.

Ky., Whitesburg.—Kentucky Coal Co. organized; capital \$150,000; R. A. Baker, J. P. Adams, R. H. Bruce; develop coal land; erect 50 coke ovens.

Ky., Wolfpit.—Elkhorn-Marrowbone Coal Co. (lately noted inceptd., capital \$50,000) organized; D. R. Coleman, Prest., Oak Hill, O.; J. E. Ratcliff, Secy.-Treas., Pikesville, Ky.; John Stair, V.-P.; S. W. Ratcliff, Mgr.; both Wolfpit; develop 150-acre coal land; proposed daily capacity 300 to 400 tons; C. G. Evans, Const. Engr., Pikesville, Ky. (See Machinery Wanted—Engine; Rails.)

Md., Cumberland.—Cumberland Smokeless Coal Co. inceptd.; capital \$100,000; L. Lee Lich-

tenstein, John F. Somerville, Daniel F. Mulen.

Mo., Huntsville.—R. E. Kiernan, Jr.; develop coal mine.

Mo., Huntsville.—A. Carson; develop coal mine.

W. Va., Charleston.—Middle Fork Block Coal Co. inceptd.; capital \$150,000; Silas W. Morris, D. E. Lloyd, Clyde B. Johnson.

W. Va., Clarksburg.—Dale Coal Co. inceptd.; capital \$150,000; A. W. and L. H. Martin, H. C. Fortney; all Haywood, W. Va.

W. Va., Hartland.—Clay Gas Coal Co., Philippi, W. Va., organized; capital \$60,000; A. F. Bennett, Prest.-Mgr., Philippi; J. W. Reeves, Secy.-Treas., Hartland; develop 104.5 acres; daily output 100 tons; install storage-battery locomotives and mine mch. (See Machinery Wanted—Mining Machinery; Locomotive.)

W. Va., Ivaton.—Right Fork Mining Co., J. M. Moore, Prest., Huntington, W. Va.; develop 360 acres; present daily output 250 tons; contemplate increase to 800 tons; mch. purchased. (Lately noted organized, improve plant, increase capacity.)

W. Va., Monticello.—Monticello Smokeless Coal Co.; erect 1-story 30x15-ft. headhouse and tippie; West Virginia Housing Corp., Contr., Davidson Bldg., Charleston, W. Va.

W. Va., Marion County.—La Mar Coal Co., Morgantown, W. Va.; purchased 150 acres coal land; develop.

W. Va., Monon.—Brady Coal Corp. chartered; capital \$2,000,000; Samuel D. and James Z. Brady, both Deveny Bldg., Fairmont, W. Va.; Arthur B. Cresson, Philadelphia, Pa.

W. Va., Monongalia County.—Osage Coal Co.; purchased 38 acres coal land; develop.

W. Va., Mt. Clare.—Dorsey Cork; open coal mine; small tonnage at rst; eventually produce 400 to 500 tons.

W. Va., Naugatuck.—Vernon Coal Co. organized, Williamson, W. Va.; capital \$20,000; R. G. Bailey, Prest.-Mgr. and Const. Engr.; W. J. Bailey, Secy.-Treas.; develop 200 acres; daily output 300 tons; install \$12,000 mch. (See Machinery Wanted—Tramway, etc.)

W. Va., Sandy Huff.—Strickler Pocahontas Coal Co. inceptd.; capital \$100,000; Sam Poland, W. J. Hatfield; both Welch, W. Va.; J. W. Strickler, War, W. Va.

W. Va., Upshur County.—Rigell Mining Co. inceptd.; capital \$100,000; W. P. Beveridge, Karl B. Kyle, G. F. Williams; all Clarksburg, W. Va.

W. Va., Woods Run.—Woods Run Coal Co. inceptd.; capital \$50,000; J. Perry Thompson, Fairmont, W. Va.; C. E. Hughes, Alexander H. Sweeney; both Pittsburgh, Pa.

W. Va., Welch.—Jaeger Development Co. incorporated; capital \$50,000; Sam Polon, I. J. Rhodes, Welch; Elmer W. Cook, Jaeger, W. Va.

W. Va., Winding Gulf.—Two-Seam Coal Co. inceptd.; capital \$25,000; H. B. Turner, S. W. Shumate, W. A. Tucker.

## Concrete and Cement Plants.

Ala., Birmingham.—Portland Cement.—Lehigh Portland Cement Co., Young Bldg., Allentown, Pa.; reported to build \$3,000,000 plant; annual capacity 1,000,000 bbls. Portland



cement; has \$200,000 site, including 250 acres limestone land; writes to Manufacturers Record: No definite plans decided upon in connection with this proposition. (Supercedes previous item.)

Okla., Ada.—Oklahoma Portland Cement Co.; enlarge plant; install 240-ft. kiln.

Tex., Dallas—Portland Cement.—Texas Portland Cement Co., J. A. Wheeler, V.-P., Treas., Praetorian Bldg.; install 8x9x220-ft. kiln and additional raw mill mchy.; increase output.

### Cotton Compresses and Gins.

S. C., Dillon.—A. K. McLellan; rebuild burned cotton gin; loss \$65,000.

Tenn., Troy.—Roberts Cotton Oil Co.; rebuild burned cotton gin; loss \$5000.

Tex., Avery.—Farmers' Gin Co. inceptd.; capital \$25,000; C. W. Archer, P. J. Medford, Lee Gathings.

Tex., Corpus Christi.—George L. Caldwell Co.; erect five-stand long-staple cotton gin; fireproof building; concrete and steel construction; mchy. purchased. (Lately noted to rebuild burned plant.)

Tex., Dodd City.—Bud Melton; rebuild burned cotton gin; loss \$5000.

Tex., Granbury.—Granbury Milling & Peanut Products Co.; rebuild burned plant; loss \$500,000.

Tex., Manchaca.—S. P. Carpenter; rebuild burned cotton gin and warehouse.

Tex., McKinney.—Thompson Gin Co. incorporated; \$40,000; G. F. and J. J. Thompson, J. B. Crockett.

Tex., San Antonio—Oil Refinery.—Grayburg Oil Co.; rebuild burned refinery; loss \$15,000.

### Drainage Systems.

Ala., West Blocton.—E. M. Bishop; interested in organization drainage district; reclaim 6000 acres in Haysap Swamp.

Okla., Sallisaw.—Sequoyah County Comms.; complete drainage system; drain 4000 acres; Fort Smith Construction Co., Contr.

Tenn., Memphis.—Big Creek Drainage Dist. Comms., Shelby County; construct 18 mi. main canal and 18 mi. laterals; 1,500,000 cu. yds. dredge work; issued \$250,000 bonds; Gaines & Carlisle, Engrs.

### Electric Plants.

Ga., Lagrange.—City, S. H. Dunson, Mayor; extend electric-light system; vote Dec. 16 on \$20,000 bonds.

Ga., Rebecca.—Rebecca Co-operative Light Co., J. H. Childs, Secy.; establish \$6000 electric-light plant; install 25 street, 15 business house and 25 residence lights; Delco Light Co. Contr.; C. T. Nipper, Engr.; both Fitzgerald, Ga.

Miss., McComb.—City; erect electric-light and power plant; vote Dec. 6 on \$300,000 bonds. Address The Mayor.

N. C., Kinston.—City, Jos. Dawson, Mayor; construct \$75,000 power plant building, auxiliary pumping station building, mchy. and chimney foundations; bids until Nov. 30; Jos. A. Whitman, Res. Engr., Kinston; W. C. Olsen, Engr., Sumter, S. C. (Lately noted.)

N. C., Pinetops.—City; install electric-light and power system; vote Nov. 23 on \$25,000 bonds. Address The Mayor.

Tex., El Paso.—El Paso Electric Railway Co.; expend \$1,029,000 in extensions and improvements; install 7500 K. W. turbine for power plant; \$785,000; \$60,000 short-line extension; \$10,000 high-tension busses and switches at power plant; \$30,000 additional high-tension transformers for power plant; \$3700 miscel-

laneous power-plant items; purchase 10 safety cars, \$70,000; complete double track on Boulevard to Tularosa switch, \$60,000; additional equipment for car barn, \$2250; additional feeders and switches railway overhead, \$3000; new turnout Fort Bliss line, \$5500.

Tex., Winnsboro.—Winnsboro Ice & Light Co. inceptd.; capital \$60,000; R. C. and Mrs. Katie A. Campbell, Mrs. J. W. Rhone.

### Fertilizer Factories.

Fla., Pensacola.—Nitro-Bacter Liquid Fertilizer Corp., F. M. Wood, Prest., Chicago, Ill.; establish plant to mfce. soil vaccine; contemplates establishing plants in every agricultural county.

Fla., Miami.—Nitro-Bacter Liquid Fertilizer Corp., F. M. Wood, Prest., Chicago, Ill.; contemplates establishing plant to mfce. soil vaccine.

Fla., Tampa.—Nitro-Bacter Liquid Fertilizer Corp., F. M. Wood, Prest., Chicago, Ill.; contemplates establishing plant to mfce. soil vaccine.

Ky., Louisville.—Louisville Rendering Co., Karl M. Zalt, 2 Exchange Bldg.; rebuild burned tankage and other packing-house offal plant; loss \$58,000.

W. Va., Ransom.—Washington, Alexander & Cooke Co.; construct 1-story 160x160-ft. mill; Hygger Bros., Gen Contrs., Montgomery, Ala.

### Flour, Feed and Meal Mills.

Ala., Hokes Bluff.—T. L. Barfield; rebuild burned grist mill, store and blacksmith shop.

Ala., Montgomery.—Capital Grain & Feed Co., C. E. Weisenburgh; erect grain elevator, corn and mixing flour plant; install mchy.; purchased. (Lately noted to erect 500-bu. roller mill.)

La., Monroe.—Standard Gin Co.; J. P. Parker, H. P. Marks and others interested; establish plant; erect buildings; install mchy.; daily output 200 tons meal and mixed feed.

Md., Emmitsburg.—Liberty Roller Mills, Victor H. Bean, Prop. and Constr. Engr., R. D. No. 3; construct 3-story 50x30-ft. brick building; day labor; install 40-bbl. daily capacity flour-mill mchy.; total cost \$10,000.

Miss., Greenville.—Southern Realty Co., Lamar Watson, Mgr.; organize co-operative company; build \$15,000 to \$20,000 plant; grind alfalfa, oats, corn, etc., and mix with molasses for feed. (See Machinery Wanted—Feed Mills.)

Mo., Independence.—Frisby Feed & Fuel Co., Chester G. Frisby, Prest., 208 E. Walnut St.; rebuild burned mill and office building; loss \$7000.

Mo., Pineville.—Ozark Electric & Mfg. Co., organized; C. D. Resler, Prest.; P. L. Carnel, V.-P.; Al York, Secy.; Jasper Strong, Treas.; purchased Kosserman mill and waterpower; install water wheel.

Okla., Oklahoma City.—Southwest Milling Co., 1900 W. Main St.; rebuild burned plant; loss \$7000.

Tex., Ballinger.—J. B. Ballard, Sweetwater, Tex.; erect flour mill.

### Foundry and Machine Plants.

Ala., Hokes Bluff.—Blacksmith Shop.—T. L. Barfield; rebuild burned blacksmith shop, store and grist mill.

Fla., Jacksonville.—Engines.—D. J. Garrison & Co. inceptd., 505 Dyal-Upchurch Bldg.; capital \$50,000.

Fla., Tampa.—Machinery.—Wizard Machine Co. inceptd.; capital \$100,000; W. P. O'Keefe, L. I. Funk, J. H. Bloodgood. (Lately noted inceptd. under Fla., Miami.)

Ky., Louisville.—Electrical Machinery.—Eclipse Electric Machinery Co., Chas. E. Willey, Prest., 31st and Madison Sts.; erect \$20,000 plant; fireproof construction; Murphy & Bro., Archts.

Md., Curtis Bay.—Railway Cars.—Baltimore Car & Foundry Co., Curtis Ave. and Locust St.; erect 1-story boiler-house; fireproof; brick; W. Valentine, Supt. of Constr.; has plans. (Lately noted.)

Tenn., Chattanooga.—Welding, etc.—Shreve Welding & Mfg. Co. (lately noted inceptd., capital \$5000) organized; 1211 Market St.; J. H. McLean, Prest.; P. W. Ansett, V.-P.; Daniel Freuler, Secy.-Treas.; has plant; install welding outfit; mfce. preheating apparatus, oil burners, acetylene burners, etc.

Tex., Graham.—Fishing Tools.—Graham Tool & Machine Co. organized; capital \$75,000; A. C. Perry, Ranger, Tex.; establish branch plant; mfce. fishing tools.

Tenn., Clarksville.—Car Trucks.—Stafford Roller Bearing Car Truck Co. organized; Leo K. Stafford; establish plant.

Tenn., Lenoir City.—Cars.—Lenoir City Car Works; erect 1-story 62x120-ft. building addition; brick and concrete construction; install 5 revolving furnaces, metal separator, journal bearing boring machine. (Lately noted to build addition.)

Tex., Dallas.—Boilers.—Texas Boiler Works; purchased site with 500 ft. railway frontage; erect plant to replace present works; increase capacity.

Tex., Wichita Falls.—Boilers.—Texas Boiler & Sheet Iron Works inceptd.; capital \$50,000; W. L. Dalton, J. F. Hagan, R. M. Leffingwell.

Va., Richmond.—Type.—Richmond Type & Electrotpe Foundry, 21 N. 12th St.; erect 2-story building; contemplated.

W. Va., Charleston.—Machinery.—Virginia Electric and Machine Works, Edward M. Keating, Prest.; increased capital from \$50,000 to \$100,000.

### Gas and Oil Enterprises.

Ga., Atlanta.—Gas Plant.—Atlanta Gas Light Co.; improve plant; issue \$5,000,000 for financing and improvements.

Ky., Cattlesburg.—Bolts Fork Petroleum Co. inceptd.; capital \$100,000; Ernest Meek, Isaac Fanin, Green Ross.

Ky., Mayfield.—Creason-McDonald Co. inceptd.; capital \$60,000; R. H. L. M. and W. H. Creason.

Ky., Paintsville.—Newcomb Oil Co. inceptd.; capital \$100,000; I. L. Auxier, J. F. and M. B. Bailey.

Md., Baltimore.—National Oil Co., Keyser Bldg.; purchased 35x201.2-ft. tract; erect plant addition.

Md., Baltimore.—Triangle Oil Corp. chartered; 433 Title Bldg.; capital \$2,000,000; Howard T. Marfin, James G. Pugh, Joseph P. Reynolds.

Okla., Enid.—Jiggs Oil Co. inceptd.; capital \$10,000; G. G. Bowen, R. W. Woolwine, H. G. McKeever.

Okla., Tulsa.—Oil Treating Co. inceptd.; capital \$25,000; Paul Blackwelder, Hal F. Rambo, Edmund Lashley.

Okla., Tulsa.—Coloch Drilling Co. inceptd.; capital \$10,000; J. H. Bloch, John Lowry, William Coon.

Okla., Tulsa.—Oklahoma Meter & Gas Testing Co. inceptd.; capital \$5000; O. H. Grimes, R. H. Barnes, E. W. LeMarr.

Okla., Tulsa.—Oil Refinery.—Mideo Petroleum Co.; erect 6,000,000-bbl. daily capacity refinery.

Tex., Breckenridge.—Oil Refinery.—D. C. Nelson, Fort Worth; erect 1600-bbl. refinery.

Tex., Dallas.—A. E. Boger Oil Co. inceptd.; capital \$25,000; A. E., T. R. and A. E. Boger, Jr.

Tex., Lagrange.—Lagrange Farmers' Oil & Gas Co. inceptd.; capital \$50,000; Lad V. Vanck, Otto C. and Chas. Eckel.

Tex., Texico.—Oil Refinery.—Magna Oil Co. inceptd.; capital \$400,000; contemplates erection five-unit refinery; each unit refine 500 bbls. daily.

Tex., Waco.—Bankers' Guaranty Drilling Co. inceptd.; capital \$12,500; drill shallow wells.

Tex., Wichita Falls.—Oil Refinery.—Ranger-Wichita Oil Co.; rebuild burned refinery; loss \$100,000.

### Ice and Cold-Storage Plants.

Ala., Fairhope.—A. O. Berglin; enlarge plant to 20-ton daily capacity; install raw-water system.

Ala., Irvington.—Irvington Public Utilities Co. inceptd.; F. W. Bishop, Pres.; Roy Sleep, Secy.-Treas.; L. P. McAllister, Mgr.; erect ice and canning plant.

Ala., Sheffield.—Slidebottom Ice Cream Co.; improve plant; install complete refrigeration system.

Fla., Haines City.—A. J. Nye, Orlando, Fla.; establish ice station.

Fla., Sebring.—People's Ice & Mfg. Co. (lately noted inceptd., capital \$25,000) organized; G. D. Godwin, Pres.; Ed L. Hainz, V.-P.; T. W. Lawton, Secy.-Treas. and Mgr.; has building; ordinary sheet iron; construction by owner; install \$11,500 compression ice machine; purchased; Frick Co., Archt.-Engr.-Contr., Waynesboro, Pa. (See Machinery Wanted—Boiler; Generator.)

Ga., Augusta.—Augusta Ice & Storage Co. inceptd.; capital \$150,000; F. H. Barrett, D. Slusky, Wm. E. Bush.

Ky., Covington.—City Ice Co., Cincinnati, O.; erect \$36,000 ice factory.

La., Shreveport.—Shreveport Ice & Brewing Co.; improve plant; \$100,000.

Mo., Cassville.—N. Hutchens and J. C. Ault; establish 10-ton daily capacity ice plant and creamery.

Mo., Hardin.—Farmers' Co-operative Exchange; purchased site; erect ice and cold-storage plants.

Mo., Paris.—J. B. Gilbert; establish ice and cold-storage plant.

Mo., Salem.—Dr. Tomlinson; establish cold-storage plant; contemplated.

Okla., Edmond.—Edmond Ice Co.; increase capacity of plant.

Okla., Newkirk.—Newkirk Ice Co.; erect plant.

Okla., Tulsa.—Tulsa-Ozark Club; install ice plant.

Okla., Walters.—Walters Ice Co.; improve plant.

S. C., Beaufort.—Burton Ice & Mfg. Co.; increased capital from \$50,000 to \$75,000.

S. C., Columbia.—City; install refrigerating outfit, including 10-ton machine, complete compression system, etc., and abattoir; Frick Co., Contr., Erie, Pa.

Tenn., Memphis.—Clover Farm Dairy Co.; erect dairy and ice-cream plant; \$250,000.

Tex., Corsicana.—Central Texas Grocery Co.; erect \$20,000 cold-storage plant.

Tex., Dallas.—W. W. Samuel; erect ice factory.

Tex., Kingsville.—Kingsville Ice & Milling Co.; double ice plant's capacity; install 100 H. P. internal combustion gas engine; purchased.

Tex., Laredo.—Home Ice Co., A. J. Neff, Pres., 1903 Victoria St.; improve plant; fireproof; mill construction; construction by owner; double capacity; purchased mch.; daily output 60 to 80 tons raw-water ice. (Lately noted increasing capital.)

Tex., Winnsboro.—Winnsboro Ice & Light Co. inceptd.; capital \$60,000; K. A. and R. C. Campbell, Mrs. J. W. Rhone.

### Irrigation Systems.

Tex., Imperial.—Pecos River Reservoir Irrigation Co. inceptd.; capital \$250,000; J. M. Simmons, J. H. McKee, R. H. Gray.

### Land Developments.

Fla., Jem.—Jem Nursery Co. inceptd.; capital \$100,000; D. C. Sherman, Pres.; F. A. Reed, V.-P.; L. E. Klatte, Secy.-Treas.

Fla., Sarasota.—Sarasota Farms Co. incorporated; capital \$100,000; L. L. Richardson, Pres.; Mary Louise Richardson, Secy.-Treas.

Ga., Lagrange.—City, S. H. Dunson, Mayor; install system of parks; vote Dec. 16 on \$15,000 bonds.

La., New Sarpy.—Blythe Co.; establish town; purchased 205-acre site; sub-divide into 1971 building lots; divide into 2 sections; west for whites and east for negroes; develop 3 parks.

Md., Baltimore.—Pelczar Land & Realty Co. inceptd.; 1718 Fleet St.; capital \$50,000; Michael Pelczar, Teofil Waszkiewicz, Stanislaus Nowac.

Va., East Radford.—Radford Improvement Corp., O. L. Stearns, Pres.; purchased 225 acres within city limits; develop for suburban section.

W. Va., Sandy Huff.—Sandy Huff Land Co. inceptd.; capital \$50,000; Sam Polan, W. J. Hatfield; both Welch, W. Va.; J. W. Strickler, War. W. Va.

W. Va., Montgomery.—Archie Land Co. inceptd.; capital \$25,000; Mathew and Lawrence Buster, Archie McKinney.

### Lumber Manufacturing.

Arkansas.—Hopper Bennett Lumber Co. incorporated; capital \$100,000; Hooper Bennett, Pres., Memphis, Tenn.; erect saw mill; purchased timber tract.

Ark., Fort Smith.—Mechanics' Lumber Co. reorganized; increased capital from \$50,000 to \$100,000; merge Seagrins Lumber Co.

Ky., Sergeant.—Stickey & English, Mendota, Va.; purchased hardwood timber tract; install second mill; develop.

La., Monroe.—Jno. A. Tiller, Lake Village, Ark.; purchased 6059 acres; develop; install lumber mills.

Md., Baltimore.—Hercules Timber Corp. chartered; 3 E. Lexington St.; capital \$500,000; Wm. H. Grannis, Robert F. Leach, Jr., Malcolm J. Conn.

N. C., Bouton.—Roland Lumber Co.; rebuild burned plant.

N. C., Bowden via Warsaw.—Turnbull Lumber Co., A. G. Turnbull; rebuild burned plant; loss \$1,000,000.

N. C., Watauga County.—H. S. Janes Timber Co., H. S. Janes, Pres., 66 Broadway, New York; develop 6000-acre timber tract; next year rebuild 31 ml. Watauga & Yadkin Ry.; preparing plans. (Supersedes recent item.)

N. C., Watauga County.—Elk Creek Lumber Co. organized; H. S. Janes, New York; H. S. Landon, North Wilkesboro, N. C.; purchased 6000 acres timber and \$300,000 sawmill and leased Watauga & Yadkin River Ry.; develop timber; rebuild railway, 31 ml. (Supersedes recent item.)

Tenn., Knoxville.—G. E. Irish, 512 Gillespie St.; has 50-acre timber tract; develop. (See Machinery Wanted—Engine; Sawmill.)

W. Va., Clover Lick.—Paul Golden; rebuild burned sawmill; loss \$10,000.

### Metal-Working Plants.

Ky., Louisville.—Clamps.—Label Clamp Mfg. Co. inceptd.; capital \$10,000; J. H. Venhoff, C. H. Porter.

N. C., Charlotte.—Slot Machine.—Company organized; 207 S. Church St.; capital \$50,000; Jeff Palmer, Pres.-Treas.; W. A. Anthony, V.-P.; Chas. N. Leigh, Secy.

Tenn., Chattanooga.—Self-lubricating Metal Cole Engineering Co. organized; F. C. Cole, Pres.; erect plant; brick and steel construction; \$25,000; purchased site; mfrs. self-lubricating metal; A. F. Hahn, Gen. Contr.

### Mining.

Ky., Ashland.—Iron.—Ashland Iron & Mining Co.; increased capital from \$1,800,000 to \$5,000,000.

Okla., Cardin.—Lead and Zinc.—Georgia Mining Co.; rebuild burned mill; loss \$100,000.

S. C., Columbia.—Sand.—Southern Silica Mining & Mfg. Co., 1643 Main St.; increase capital from \$10,000 to \$30,000. (Lately noted to purchase additional sand pit.)

S. C., Columbia.—Silica.—Southern Silica Mining & Mfg. Co., H. E. Wells, Secy.; increased capital from \$10,000 to \$30,000.

Tex., Houston.—Sand and Gravel.—Producers' Sand & Gravel Co. inceptd.; capital \$100,000; Ray McDonald, O. K. Willborg, Joseph Cathriner; establish plant; install mch.; purchased. (Supersedes recent item.)

Texas.—Sulphur.—Penn-Tex Sulphur Co. incorporated; capital 10,000 shares; Richard L. Phillips, Sigmund Faust; both New York; L. E. Cawley, Brooklyn, N. Y.

### Miscellaneous Construction.

Ala., Mobile.—Coal Terminal.—War Dept., Newton C. Baker, Secy., Washington, D. C.; construct \$400,000 coal terminal on Blakesley Island; 1500-ft. water front; capacity 40,000 tons coal and 20,000 tons manganese; latter from Cuba and Brazil; Murray Brown, Pres., Alabama Harbor Commn.

Fla., Tarpon Springs.—Docking Facilities, etc.—City; improve docking facilities, municipal buildings, park and street paving; voted \$225,000 bonds. Address The Mayor.

La., Grand Isle.—Canal.—Grand Isle Navigation Canal Commrs.; construct canal for navigation of boats from New Orleans to other points.

S. C., Charleston.—Terminals.—Charleston Port Terminals inceptd.; capital \$100,000; J. Ross Hanahan, Joseph M. Whitsitt; leased terminals, including dock, headhouse and warehouse.

S. C., Spartanburg.—Greenhouse.—T. C. Charles, Evans St.; rebuild burned greenhouses.

Tex., Austin.—Laboratories.—Austin X-Ray & Clinical Laboratory, Dalton Richardson, 404 Scarbrough Bldg.; install X-ray and laboratory equipment. Lately noted increased capital to \$15,000. (See Machinery Wanted—X-Ray Apparatus.)

Tex., Sherman.—Laundry.—Will Pierce & Co. inceptd.; capital \$7000; Will Pierce, Arch. L. Gough, Harry Harp; establish steam laundry.

Va., West Norfolk.—Wharf.—Hasting Bros., Seaboard Bank Bldg.; rebuild burned wharf; loss \$40,000.

Tex., Aransas Pass.—Seawall.—City; construct seawall; voted \$225,000 bonds. Address The Mayor. (Lately noted to vote on bonds.)

Va., Norfolk—Quay Wall.—Navy Dept., Washington, D. C.; construct 350 ft. quay wall at navy-yard; \$235,000; H. P. Converse & Co., Contrs., Boston, Mass. (Bids lately noted.)

### Miscellaneous Enterprises.

Ala., Birmingham—Potato Curing.—Dixie Food Products Inceptd.; 1038 First National Bank Bldg.; capital \$100,000; F. D. Lander, Pres.

Fla., Titusville—Construction.—Akerman Construction Co. Inceptd.; capital \$50,000; B. Akerman, Pres.; H. H. Akerman, V.-P.; F. C. Campbell, Secy.-Treas.

Md., Baltimore—Junk.—Chesapeake Corp. chartered; Ranstead's Wharf; capital \$100,000; Ellis and Wm. Rosenberg, Bernard E. Stern.

Md., Baltimore—Taxicab Service.—Black & White Taxicab Co. Inceptd.; 517 Franklin Terrace; capital \$100,000; Melville Stevenson, Thomas Ruggles, Gordon Ashley.

Miss., Natchez—Construction.—Bost & Moss organized; Bost Bldg.; R. E. Bost, C. S. Moss.

N. C., Charlotte—Laundry.—Charlotte Co., J. J. Harrill; erect 64x59-ft. laundry building; \$50,000.

S. C., Columbia—Abattoir.—City; install abattoir and refrigerating outfit, including 10-ton machine, complete compression system, etc.; Frick Co., Contr., Erie, Pa.

S. C., Sumter—Laundry.—Sumter Steam Laundry Inceptd.; capital \$20,000; J. T. Brightwell, Pres.; R. Leland Moore, Secy.-Treas.; J. D. King, Gen. Mgr.

Tex., Dalhart—Hardware.—Dalhart Hardware Co. Inceptd.; capital \$75,000; H. B. and J. T. Thompson, J. N. Riggs.

Tex., Fort Stockton—Stock Farms.—7-D Stock Farm Co. Inceptd.; capital \$150,000; G. L. and W. R. Moody, V. L. Sullivan.

W. Va., Welch—Laundry.—Welch Laundry Co., Phil C. Jacks, Mgr., Charleston, W. Va.; erect 3-story-and-basement 50x90-ft. building; brick and concrete construction; Alex. Mahool, Archt., L. & C. Bldg., Bluefield, W. Va.

### Miscellaneous Factories.

Ala., Mobile—Bottling.—Palliser Bottling Co.; increase capital from \$10,000 to \$50,000.

Fla., Jacksonville—Optical Supplies.—Riles-Catheart Optical Co. Inceptd.; capital \$20,000; R. J. Riles, Pres.; N. W. Cathcart, Secy.-Treas.

Ga., Atlanta—Candy and Cracker.—Frank E. Block Co., Brooks Morgan, Pres., 80 Elliott St.; rebuild factory; 2 brick buildings; loss \$75,000.

Ga., Dublin—Peanut Shelling.—Dublin Peanut Co. organized; W. P. Postell, Mgr.; has plant; daily output 20 tons shelled peanuts.

Ga., Macon—Bakeries.—American Bakeries Co., W. L. Jackson, Chattanooga, Tenn.; establish branch plant; purchased Sears Sanitary Baking Co.'s plant; remodel.

Ky., Louisville—Refrigerators.—American Sanitary Refrigerator Co.; Silas Rosenfeld, Baker Rodman and Arthur Brown interested; all Owensboro, Ky.; acquired plant; mfrs. electrically operated refrigerators.

Ky., Louisville—Chemical Supplies.—Harry R. King Co. Inceptd.; capital \$20,000; Harry R. King, R. O. Nicholls.

Ky., Louisville—Chemicals.—Louisville Chemical Co. organized; B. F. Gregory, Pres.; purchased 2 adjoining 3-story brick buildings; remodel to enlarge plant; later erect plant; mfrs. disinfectants, etc. (Lately noted Inceptd., capital \$75,000.)

Md., Baltimore—Seeds, etc.—J. Bolgiano & Son Inceptd.; Light and Pratt Sts.; capital 1000 shares; Chas. J. Bolgiano, Wm. H. Mihm, Morris R. Robinson.

Md., Baltimore—Simplex Devices Inceptd.; 125 Law Bldg.; James E. Davis, Joshua S. Linthicum, Ernest Warner.

Md., Baltimore—Chemicals.—Federal Drug & Chemical Co. organized; 24 S. Charles St.; Edw. Robinson, Pres.; Geo. J. Ettenberg, Secy. and Gen. Mgr.; has 4-story-and-basement building; mfrs. pharmaceutical and toilet products.

Md., Baltimore—Clothing.—Fashion Garment Co. Inceptd.; 3 E. Lexington St.; capital \$100,000; Frank E. Welsh, Jr., Richard E. Preece, E. Harvey Peters.

Md., Baltimore—Paper Boxes.—Charles-Kelley Paper Box Co. organized; 47 S. Gay St.; Jas. L. Charles, Pres.; Horace F. Kelley, V.-P.; both Overlea, Md.; mfrs. plain and fancy paper boxes. (Lately noted.)

Md., Baltimore—Bakeries.—Yankee System Baking Co., Munsey Bldg.; acquired building; remodel; establish bakery.

Md., Bentley Springs—Cigar Wrappers.—Patented Cigar Wrapper Co. organized; Herman D. Young, Pres.; Willard J. Goodfellow, V.-P. and Mgr.; W. P. Fogle, Secy.-Treas.; install tobacco mch'y., including 48x48-in. drier, compress, juicing machine, cooking tank, etc.; daily output 250 lbs. cigar wrappers from pure tobacco stems. Lately noted Inceptd., capital \$50,000. (See Machinery Wanted—Tobacco Plant Equipment.)

Md., Hurlock—Bakery.—Jas. B. Hurlock; construct 75x60-ft. concrete block building; composition roof; concrete floor; \$8000; hot-water heat, \$400; A. O. German, Archt.-Contr.

Miss., Gulfport—Ice Cream.—Harris Ice Cream Co. Inceptd.; capital \$100,000; J. O. Gillespie, Gulfport; E. R. Harris, New Orleans, La.; S. A. Skellie, Long Beach, Miss.; establish creamery and ice-cream plant. (Lately noted Inceptd.)

Mo., Cassville—Creamery.—N. Hutchens and J. C. Ault; establish creamery and ice plant.

Mo., St. Louis—Coffee.—Biston Coffee Co., 907 N. Broadway; increase capital from \$60,000 to \$150,000.

Mo., St. Louis—Women's Clothing.—Hykins, Friedman & Co.; lease fifth floor of building at 700-794 Washington Ave.; establish daylight factory and showroom.

N. C., Asheville—Bakery.—Asheville Baking Co. Inceptd.; capital \$30,000; Roger A. Grant, Helen G. Grant, Charles Kappel.

N. C., Charlotte—Sizing Compounds.—D. & M. Co. Inceptd.; capital \$100,000; J. L. Dabbs, H. G. Mayer, B. C. Nalle.

N. C., Charlotte—Chemicals, etc.—D. & M. Co. Inceptd.; 517 N. Tryon St.; capital \$100,000; John L. Dabbs, H. G. Mayer, B. C. Nalle.

N. C., Winston-Salem—Candy.—Ray Johnson, Box 992; contemplates establishing plant to mfr. candy; capital \$10,000; will rent building; brick or tile construction; metal or composition roof; hollow fireproof tile; concrete floors. (See Machinery Wanted—Candy Machinery; Tile; Concrete Floors.)

Okla., Hugo—Ice Cream.—Hugo Ice Cream Co.; construct plant addition; increase daily capacity.

Okla., Tulsa—Auto Tops.—California Auto Top Co. Inceptd.; capital \$50,000; H. P. De Longy, S. Goodman, E. J. Lundy.

S. C., Columbia—Syrups.—Remer-Dell Products Co. Inceptd.; capital \$25,000; G. Y. Remer, Pres.; D. O. T. Dell, Secy.-Treas.

S. C., Florence—Ice Cream.—Pa'metto Ice Cream Co.; increased capital; install additional equipment.

S. C., Springfield—Lime-Cola.—Springfield

Lime-Cola Co.; increase capital from \$10,000 to \$30,000.

S. C., Union—Remedies.—Union Remedies Co. organized; J. W. Buchanan, Pres.; F. J. Parham, Secy.; R. A. Oliphant, Treas. and Sales Mgr.; construct \$18,000 fireproof building; 80x40 ft.; install chemical laboratory equipment, mixers, etc.; mfrs. remedies for animals. (Lately noted Incorporated, capital \$250,000.)

Tenn., Knoxville—Bottling.—Chera-Cola Co., and E. C. Briscoe Motor Co.; construct concrete factory building; 12,000 ft. floor space; white marble floors; white walls; install automatic mch'y.

Tenn., Memphis—Clover Farm Dairy Co.; erect ice-cream plant and dairy.

Tenn., Memphis—Toilet Preparations.—Phanotax Chemical Co. organized; 811 Polk St.; capital \$50,000; A. G. Coleman, Pres.-Treas.; K. C. Joplin, V.-P. and Gen. Mgr.; purchased plant; remodel and enlarge.

Tex., Dallas—Coffee.—Dal-Tex Coffee Co. Inceptd.; capital \$68,000; A. J. Geisenberger, Alex. Beckman, R. D. Thorburn.

Tex., Dallas—Shoes.—Payne Shoe Co. Inceptd.; capital \$10,000; Emmett Thurmon, Graham Payne, J. N. Fender.

Tex., El Paso—Coffee.—Pan-American Coffee Co.; increase capital from \$10,000 to \$15,000.

Tex., Fort Worth—Rubber.—Smith-Calhoun Rubber Co. Inceptd.; capital \$25,000; W. R. and M. E. Calhoun, T. R. H. Smith.

Tex., Granbury—Peanuts.—Granbury Milling & Peanut Products Co.; rebuild burned plant; loss \$500,000.

Tex., Houston—Coffee.—Magnolia Coffee Co.; increase capital from \$20,000 to \$60,000.

Tex., Laredo—Soap.—Mexican-American Soap Co.; increase capital from \$15,000 to \$60,000.

### Motor Cars, Garages, Tires, Etc.

Ala., Luverne—Garage.—Smith Hornsby Motor Co.; rebuild burned garage; loss \$16,000.

Fla., De Land—Garage.—Cook & Rowland; erect garage; 1 and 2 stories; 80x160-ft.; Francis M. Miller, Archt.

Ky., Elizabethtown—Garage.—Elizabethtown Buick Co. Inceptd.; capital \$15,000; Clyde C. Balm, Guy M. Hudgins, R. H. Brown.

Ky., Louisville—Tires.—Ten Broeck Tire Co., 840 S. 26th St.; erect plant addition.

Ky., Louisville—Garage.—Zach Wilhoit; erect \$30,000 garage; fireproof; brick; concrete; steel; Gaffney & Epping, Archts., 457 S. 2d St.

Ky., Monticello—Garage.—Wayne Taxi Co. Inceptd.; capital \$10,000; G. A. Barnes, J. W. Simpson, James Castello.

Ky., Owensboro—Tires.—R. E. Rodgers; erect \$6000 sales and service station; 4½x65 ft.; brick; composition roof; concrete floor; C. W. Kimberlain, Archt. (See Machinery Wanted—Building Materials.)

Ky., Owensboro—Garage.—Elmer Carden, 115 Orchard St.; erect garage.

Ky., Owensboro—Garage.—R. E. Rogers; erect garage; 45x45 ft.; brick covered with rubberoid.

Md., Baltimore—Garages.—Daniel Shipley, 1104 W. 35th St.; erect two 1-story garages; \$7000.

Md., Baltimore—Garage.—Rice Garage; erect 85x125-ft. garage; Smith & May, Archts., Calvert Bldg.

Md., Baltimore—Garage.—John I. Copeland, 29th and Remington Ave.; erect garage; 120 stalls, each 1 story, 10x18 ft.; C. K. Wells, Contr., 2919 Guilford Ave.

Md., Baltimore—Automobiles.—Richardson Automobile Electric Corp. organized; 7 W.



Chase St.; Donald R. Richardson, Prest.-Mgr.; Mrs. Winfield F. Courts, Secy.-Treas.; install lathe, drill, testing apparatus and battery-charging plant.

Md., Easton—Automobiles—Lawson Automobile Co.; increase capital from \$25,000 to \$50,000.

Md., Germantown—Garage—Andrew Krause, 400 West St.; erect garage; 1 and 2 story, 65x66x48x75x65x55 ft.; Lloyd Bros. Contrs., 17 Franklin St.; all Annapolis, Md.

Miss., Mount Olive—Automobiles—Walker Motor Co. inceptd.; capital \$26,000; R. W. Walker, A. W. Evans.

Miss., Tunica—Automobiles.—Commercial Motor Car Co. inceptd.; capital \$25,000; W. R. Kirby, W. H. Houston.

Mo., Kansas City—Garage—G. M. Baltis, 2801 Wabash St.; erect garage; 1 story and basement, 50x132 ft.; day labor.

Mo., St. Louis—Garage—W. F. Schaefer, 2616 S. Jefferson Ave.; erect \$20,000 garage; 2 stories; 28x52 ft.; brick; slate roof; hardwood floors; hot-water heating; electric lighting plant; Erdbruegger & Beumer, Contrs., 2908 National Bridge Ave.; Nolte & Nauman, Archts., Fullerton Bldg. (See Machinery Wanted—Tile; Flooring.)

Mo., St. Louis—Garage—Mendenhall Motor Co., W. J. Mendenhall, Prest., 2315 Locust St.; erect addition to garage; 1 story brick; fireproof; brick walls; reinforced concrete; Wm. P. McMahon, Archt., Title Guaranty Bldg.

N. C., Charlotte—Automobiles.—O. J. Thies; erect \$65,000 automobile building; 2 stories and basement; 46x146 ft.; 20,000 sq. ft. space; brick; tile; plate-glass front; showroom department, embracing first and second floor, with mezzanine floor; Thies-Smith Co., Contr.

N. C., Raleigh.—Pollockville Garage Co. inceptd.; capital \$40,000; J. H. Bell, H. Simmons, B. T. Scott.

Okl., Tulsa—Automobiles—Tulhoma Motor Co. inceptd., capital \$1000; James Coburn, V. Goble, C. E. Orlander.

Tenn., Knoxville—Automobiles—E. C. Briscoe Motor Co., and Chero-Cola Co.; erect concrete building; 12,000 ft. floor space; white marble floors; white walls. (See Miscellaneous Factories.)

Tex., Fort Worth—Filling Station—Mid-Texas Petroleum Co.; erect \$100,000 filling station; O. J. McQuerry, Contr. (Lately noted.)

Tex., Fort Worth—Tires—Guarantee Tire & Vulcanizer Co. inceptd.; capital \$50,000; W. H. Beck, R. S. Smith, Max Eversberg.

Tex., Houston—Automobiles—Driverless Automobile Co. inceptd., capital \$10,000; F. S. Glover, F. Scott Glover, L. A. Glover.

Tex., Houston—Garage—Gordon Sewall & Co.; rebuild burned garage.

Tex., San Antonio—Tires, etc.—Goodwear Tire & Belt Factory, H. L. Fullerton, Prest., 223 Bedell Bldg.; erect first unit of factory building; 70x120 ft.; fireproof. (Supersedes recent item.)

Tex., Vernon.—White Garage; rebuild burned garage; loss \$80,000.

Tex., Waco—Automobiles—Brazos Motor Co. inceptd.; capital \$20,000; Ed McCullough, L. G. McCullough, G. W. McCullough.

Tex., Yorktown—Automobiles.—Yorktown Motor Co. inceptd.; capital \$10,000; H. R. Froese, J. R. Froese, V. Schiwetz.

Va., Alexandria—Garage—H. Herfurth, Jr., St. Asaph and Madison Sts.; has contract for garage; 1 story; 52x118 ft.; Speiden & Speiden, Archts., Washington, D. C.

Va., Altavista—Garage—A. J. Dalton; erect

garage, dairy, grain and other buildings; Meanor & Handlasher, Archts., R. P. Bldg.; all Huntington, W. Va.

W. Va., Charleston—Automobiles.—Arnett Sales Co. inceptd.; capital \$10,000; Floyd Hieatt, Gus Arnett, T. D. Siler.

W. Va., Charleston—Garage—R. J. Zimmerman, 408 Reffner Ave.; erect garage; 2 story and basement, 29x22 ft.; brick; limestone; H. Russ Warne, Archt., Masonic Temple Bldg.

W. Va., Clarksburg—Automobiles.—Climax Sales Co. inceptd.; capital \$25,000; Roscoe Martin, Maude Martin, J. Thomas Johnston.

W. Va., Huntington—Garage.—F. F. Starcher, Day & Night Bank Bldg.; erect garage; 1 story, 45x160 ft.; L. J. Dean, Archt., Foster Bldg.

W. Va., Huntington—Garage.—Fourth Ave. Garage organized; 11th St. and Fourth Ave.; L. Gutman, Prest.; M. Rubin, V.-P.; erect garage; 2 stories; 90x180 ft. (Lately noted inceptd., capital \$10,000.)

W. Va., Lewisburg—Automobiles.—J. C. Boggs Motor & Light Co. inceptd.; capital \$50,000; J. C. Boggs, Jno. A. Littlepage; both Lewisburg; W. A. Charleston, Hinton, W. Va.

W. Va., Logan—Garage—J. W. Fisher; has contract for garage; 1 story, 40x86 ft.; brick.

W. Va., Wheeling—Garage—Twelfth Street Garage Co. organized; E. A. Baden, Prest.; erect garage; 5 story and basement, 82x125 ft.; brick; C. W. Bates, Archt., 77 14th St. (Lately noted inceptd., capital \$150,000.)

W. Va., Welch—Automobiles.—Tug River Automobile Co. inceptd.; capital \$50,000; H. W. Saunders, I. J. Rhodes, M. S. Taylor.

W. Va., Welch—Automobiles.—Welch Automobile Co. inceptd.; capital \$100,000; R. H. Miller, John W. Blakeley, D. F. Strother.

### Railway Shops, Terminals, Roundhouses, Etc.

Md., Baltimore—Repair Shops, etc.—Western Maryland Ry., H. R. Pratt, Ch. Engr.; erect buildings and equip for repair shop, restroom and storage of oil.

Miss., Meridian—Meridian & Memphis R. R.; construct roundhouse and terminal additions.

Tex., Amarillo—Gulf, Colorado & Santa Fe Ry., F. Merritt, Ch. Engr., Galveston, Tex.; enlarge roundhouse; \$125,000.

### Road and Street Construction.

Ala., Guntersville—State Highway Comsn., Montgomery, Ala.; grade and drain 18.88 mi. Guntersville and Boaz road; Federal-aid Project No. 88; invite new bids; rejected previous bids for surfacing; will invite bids in spring. (See Machinery Wanted—Road construction.)

Ala., Prattville—City; pave 3 blocks and sidewalks; bids until Dec. 7. Address The Mayor.

D. C., Washington—District Comms., 509 District Bldg.; grade 16,500 cu. yds. Connecticut Ave. N. W., Chappell Road to Pierce Mill Road; Geo. Hyman, Contr., 1116 Morse St. N. E.; C. B. Hunt, Engr. of Highways. (Lately noted inviting bids.)

Fla., Clearwater.—Pinellas County Comms.; construct 10-ft. brick road from Pass-a-Grille bridge through St. Petersburg beach property; Georgia Engineering Co., Contr.

Fla., Tarpon Springs.—City; pave street, improve docks, parks and municipal buildings; voted \$226,000 bonds. Address The Mayor.

Fla., Vero.—City; construct asphalt oil surface rock pavement from west approach to bridge across Indian River to west city limits; pave 2 blocks in business section,

width 50 ft.; vote Dec. 14 on \$40,000 bonds. Address The Mayor.

Ga., Americus.—State Highway Dept. of Georgia, Atlanta, Ga.; construct 5 mi. Georgetown-Fort Gaines Road; sand-clay; 26-ft. width surfacing; bids until Nov. 30; W. C. Caye, Jr., Div. Engr., Third Dist., Americus, Ga. (See Machinery Wanted—Road Construction.)

Ga., Dublin.—Laurens County Comms.; construct roads and build bridges; issue \$300,000 bonds.

Ga., Lagrange.—City, S. H. Dunson, Mayor; pave streets; vote Dec. 16 on \$200,000 bonds.

Ga., Macon.—City; construct and pave railroad tracks and concrete platforms at Macon Terminal Station; \$10,000; A. B. Crump Construction Co., Contr., 511 Grand Bldg.

La., Covington.—Board State Engrs., Room 332 Malson Blanche Annex, New Orleans; construct 8.35 mi. Covington-Hammond highway; 12.51 mi. Covington-Sliddell highway; lowest bidder Holton Lumber Co., Unedus, La. (Previously noted inviting bids.)

La., De Quincy.—Town; construct 4½ mi. paved sidewalks; \$50,000; invite bids; F. Shotts & Sons, Engrs., Lake Charles, La.

La., New Orleans.—City, Martin Behrman, Mayor; pave Audubon St.

La., Springville.—Livingston Parish Police Jury; construct 9 mi. Government highway beginning at Amite River and extending to Walker; graded road from Livingston to Holden; gravel; Peterman & Lousatol, Contrs., Franklin, La.

Md., Belair.—State Roads Comsn., 601 Garrett Bldg., Baltimore; grade and drain 3.04 mi. Philadelphia road; low bidder, Thomas Mullan, 3945 Greenmount Ave., Baltimore, at \$16,900.50; D. P. Campbell, Engr., 601 Garrett Bldg., Baltimore. (Lately noted inviting bids.)

Md., Frederick.—State Roads Comsn., 601 Garrett Bldg., Baltimore; construct 2.42 mi. State Highway from Harmony Grove to Frederick; macadam resurfacing; Frederick County, Contract F-41; bids until Dec. 7. (See Machinery Wanted—Road Construction.)

Md., La Plata.—State Roads Comsn., 601 Garrett Bldg., Baltimore; gravel surface 3.90 mi. State highway from end Contract CH-15 to Benedict; Charles County, Contract CH-18; bids until Nov. 30. (See Machinery Wanted—Road Construction.)

N. C., Hendersonville.—State Highway Comsn., Raleigh, N. C.; construct 10.22 mi. road from Hendersonville to Transylvania line; Federal-Aid Project 115; sand and gravel; W. S. Fallis, State Highway Engr., Raleigh.

N. C., High Point.—City; construct 7000 sq. yds. Warrenite-bitulithic pavement on 5-in. concrete foundation; R. G. Lassiter, Contr., Norfolk, Va.

Miss., Holly Springs.—Marshall County Supvrs., O. H. Wright, Clk.; construct roads; invite new bids in spring; rejected previous bids; H. C. Dietzer, State Highway Engr., Jackson, Miss. (Lately noted inviting bids.)

Mo., Jefferson City.—State, Russell B. Gardner, Governor; voted amendment to constitution providing for \$60,000,000 bonds. (Supersedes recent item.)

N. C., Bakersville.—State Highway Comsn., Raleigh, N. C.; surface 7 mi. Bakersville-Spruce Pine road; Federal-aid Project 135-A; gravel or water-bound macadam; W. S. Fallis, State Highway Engr., Raleigh.

N. C., Boone.—State Highway Comsn., Raleigh, N. C.; construct 5 mi. Boone-Blowing Rock road and 7.5 mi. road from Boone to Caldwell county line; water-bound macadam

Federal-aid Project 134-A and 134-B; W. S. Fallis, State Highway Engr., Raleigh.

N. C., Burlington.—City, M. W. McPherson, Clk.; pave streets; issue \$22,000 bonds.

N. C., Burnsville.—State Highway Comsn., Raleigh, N. C.; construct 14 mi. road; Federal-Aid Project 141; shale or gravel; W. S. Fallis, State Highway Engr., Raleigh.

N. C., Burgaw.—Pender County Comms.; construct 20 mi. Wilmington-Fayetteville and 15 mi. Wilmington-Newbern road; \$103,000 available.

N. C., Durham.—City; pave streets; issue \$125,000 bonds; H. W. Hueffner, City Engr. (Supersedes recent item.)

N. C., Franklin.—State Highway Comsn., Raleigh, N. C.; construct 17.93 mi. road from Almond to Tipton; shale or gravel; W. S. Fallis, State Highway Engr., Raleigh.

N. C., Greensboro.—Guilford County Comms.; construct 21,000 sq. yds. Warrenite-bitulithic pavement on 5-in. concrete foundation; R. G. Lassiter, Contr., Norfolk, Va.

N. C., Hayesville.—State Highway Comsn., Raleigh, N. C.; construct 12 mi. road from Hayesville to Cherokee county line; Federal-Aid Project 118-A and B; sand and gravel; W. S. Fallis, State Highway Engr., Raleigh.

N. C., Lenoir.—State Highway Comsn., Raleigh, N. C.; topsoil 8 mi. road from Lenoir to Catawba County line; Federal-Aid Project 130; W. S. Fallis, State Highway Engr., Raleigh.

N. C., Lillington.—Harnett County, Stewart Creek Township; grade, drain and surface 7 mi. Raleigh-Fayetteville highway through Stewart Creek Township; issue \$25,000 bonds; W. T. Smith, Engr. Duke, N. C.

N. C., Lumberton.—Robeson County Commissioners, Saddletree township; construct roads; vote Dec. 30 on \$25,000 bonds.

N. C., Robbinsville.—State Highway Comsn., Raleigh, N. C.; construct 13 mi. road from Robbinsville to Tipton; gravel.

N. C., Shelby.—State Highway Comsn., Raleigh, N. C.; topsoil 5.11 mi. road from Shelby to Cherokee County line; Federal-Aid Project 131; W. S. Fallis, State Highway Engr., Raleigh.

N. C., Wentworth.—Rockingham County Comms., Hunter K. Penn, Clk.; construct roads and build bridges; issued \$200,000 bonds.

Okla., Tulsa.—Tulsa County Comms.; grade 8 mi. road between Bixby and Stone Bluff; Davis & Dunn, Contrs.

S. C., Charleston.—Charleston County Commissioners; construct concrete roadway; \$90,000 available.

S. C., Florence.—Florence County Comms.; construct 5.982 mi. Florence-Sumter road; Federal-aid Project No. 47; 23,068 lbs. steel reinforcement; bids until Nov. 29; W. S. Lewis, Div. Engr. (See Machinery Wanted—Road Construction.)

S. C., Chesterfield.—State Highway Comsn., Columbia, S. C.; construction 23.12 mi. Chesterfield-Chesaw road and 3.23 mi. Washington-Atlanta highway; gravel.

S. C., Columbia.—City; pave streets; voted \$300,000 bonds. Address The Mayor.

S. C., Dillon.—State Highway Comsn., Columbia, S. C.; construct 19.77 mi. road from Marion County line to Marlboro County line; Federal-aid Project 50; gravel; C. H. Moorefield, State Highway Engr., Columbia.

S. C., Greenwood.—State Highway Comsn., Columbia, S. C.; construct 1.76 mi. Section 3 Dixie Highway; cement and concrete; Federal-aid Project 55; and 8.1 mi. Section B Dixie Highway; topsoil; C. H. Moorefield, State Highway Engr., Columbia.

S. C., Kingstree.—State Highway Comsn., Columbia, S. C.; construct 11.03 mi. road from Clarendon County line to Kingstree; sand-clay; Federal-aid Project 80; C. H. Moorefield, State Highway Engr., Columbia.

S. C., Manning.—State Highway Comsn., Columbia, S. C.; construct 7.92 mi. road from Manning toward Sumter; sand-clay; Federal-aid Project 44; C. H. Moorefield, State Highway Engr., Columbia.

S. C., Saint George.—State Highway Comsn., Columbia, S. C.; topsoil 15 mi. Dorchester-Reevesville road.

S. C., Saint Matthews.—State Highway Comsn., Columbia, S. C.; construct .67 mi. road through St. Matthews; asphaltic concrete; Federal-aid Project 104; C. H. Moorefield, State Highway Engr., Columbia.

S. C., Spartanburg.—State Highway Comsn., Columbia, S. C.; construct 12.54 mi. road from end Project 24; Federal-aid Project 73; C. H. Moorefield, State Highway Engr., Columbia.

S. C., Union.—State Highway Comsn., Columbia, S. C.; construct 5.33 mi. road from Forest Creek to Spartanburg County line; Federal-aid Project 92, and 3.73 mi. road from Kelley's Station to end Federal-aid Project 100; C. H. Moorefield, State Highway Engr., Columbia.

S. C., York.—State Highway Comsn., Columbia, S. C.; topsoil 6.52 mi. road from Rock Hill to Roddey's Station; Federal-aid Project 71; C. H. Moorefield, State Highway Engr., Columbia.

S. C., York.—York County Comms.; topsoil 4 mi. road; \$15,000 available; Austin & Ritchie, Contrs., Badin, N. C.; W. W. Miller, Engr., Rock Hill, S. C. (Lately noted inviting bids.)

Tenn., Cleveland.—City; extend paved streets; issue \$200,000 bonds. Address The Mayor.

Tenn., Cleveland.—City, L. L. Woollen, Mayor; construct sheet asphalt, asphaltic concrete, cement concrete or bituminous concrete streets; \$350,000 available; invite bids in spring; S. D. Newton, Engr. (See Machinery Wanted—Paving; Road Roller.)

Tex., Brady.—McCullough County Comms.; gravel surface and drain 1.5 mi. Mason-Brady road; W. P. Doty, County Engr.

Tex., Canyon.—City; pave streets; voted \$30,000 bonds. Address The Mayor.

Tex., Center.—Shelby County Comms.; grade and drain 14 mi. Highway 22; T. H. Dillon, County Engr.

Tex., Childress.—Childress County Comms.; grade, surface and drain 21.5 mi. road; T. H. Dillon, Engr.

Tex., Cleburne.—Johnson County Comms., O. O. Chrisman, Judge; construct 20 mi. Cleburne and Dallas road and 8 mi. Godley and Cresson road; \$211,918; F. S. Harris Construction Co., Contr., Fort Worth, Tex. (Lately noted inviting bids.)

Tex., Crowell.—Foard County Comms.; improve 14.56 mi. Highway 4, 24 ft. wide; 51,000 lin. ft. grading; construction by day labor.

Tex., Daingerfield.—Morris County, G. E. Shive, Judge; grade, surface and drain 10.63 mi. Highway 1; 4151 cu. yds. gravel surfacing; bids opened; McClendon & Purnell, County Engrs.

Tex., El Paso.—City, Chas. Davis, Mayor; construct retaining wall and stone guard wall; \$257,750; P. F. Brick, Contr.

Tex., Fort Worth.—Tarrant County Commissioners, H. L. Small, Judge; construct 8 mi. Grapevine-Arlington road; \$82,216; T. A. Griffin, Contr.

Tex., Fort Worth.—Tarrant County Com-

missioners, H. L. Small, Judge; grade and drain 6.824 mi. Kutemans Cut-off road; bids opened; H. V. Glenn, Engr. (Supersedes recent item.)

Tex., Houston.—City; pave streets; voted \$200,000 bonds. Address The Mayor. (Lately noted to vote.)

Tex., Linden.—Cass County Comms.; grade, surface and drain 10.99 mi. Atlanta Road; Highway 1-C; 17,197 cu. yds. gravel surfacing; Hess & Skinner, Engrs., Southwestern Life Bldg., Dallas, Tex. (Lately noted to vote on bonds.)

Tex., San Marcos.—Hays County Comms., J. R. Wilhelm, Judge; grade, surface and drain 17.05 mi. Austin-Fredericksburg road; lowest bidder, Hays County. (Lately noted inviting bids.)

Tex., Vernon.—Wilbarger County Comms.; construct roads in Chillicothe Comms. Precinct; voted \$50,000 bonds.

Tex., Waco.—St. Louis Southwestern Ry., A. A. Mathews, Ch. Engr., Tyler, Tex.; pave Mary St.; brick; \$90,000.

## Sewer Construction.

D. C., Washington.—Dist. Comms., 509 Dist. Bldg.; construct 1000 lin. ft. 15-in. dia. pipe sewer; \$3000; A. E. Phillips, Sanitary Engr.; Geo. Hyman, Contr., 1116 Morse St. N. E. (Lately noted bids until Nov. 8.)

Fla., Pensacola.—City; relay sewers on De Villiers St.; \$20,000. Address The Mayor.

Ga., Lagrange.—City, S. H. Dunson, Mayor; construct and extend sewer system; vote Dec. 16 on \$100,000 bonds.

Ky., Louisville.—City; contemplates extension sewer system; \$100,000; J. Chambers, City Engr.

Miss., Meridian.—City, Jno. M. Dabney, Mayor; construct storm and sanitary sewers on 24th Ave.; \$20,200; Jno. C. Watts, Engr., Meridian; Myers Construction Co., Contr., Hattiesburg, Miss. (Lately noted bids until Nov. 11.)

Miss., Meridian.—City, John M. Dabney, Mayor; construct 6 to 24-in. storm and sanitary sewers; \$24,233.24; Myers Construction Co., Contr., Hattiesburg, Miss.; John C. Watts, Engr., Meridian, Miss. (Lately noted inviting bids.)

Mo., Jefferson City.—City; construct sewer in Dist. No. 26; \$11,191.50; Thomas Kierns, Contr.

N. C., Durham.—City; extend sewer system; contemplates issuing \$100,000 bonds; H. W. Kueffner, City Engr.

Okla., Clinton.—City, F. H. Palmer, Mayor; construct sewers; lay cast-iron water mains, etc.; 110 lin. ft. 12-in. vitrified sewer pipe; manhole; 18,150 lbs. cast-iron pipe; gate valves, etc.; bids until Dec. 2; Black & Veatch, Engrs., Mutual Bldg., Kansas City, Mo. (See Machinery Wanted—Sewers.)

Tex., Austin.—City; extend sewers; vote Dec. 14 on \$55,000 bonds, erect additions to sewage-disposal plant; vote Dec. 14 on \$20,000 bonds; C. E. Leonard, City Engr. (Supersedes recent item.)

Tex., Houston.—City; construct storm sewers and drainage; voted \$75,000 bonds; construct sanitary sewers; voted \$100,000 bonds. Address The Mayor. (Lately noted to vote.)

Tex., Wichita Falls.—City, Geo. W. Thorburn, Clerk; construct storm sewers in Indiana, Travis and Austin Sts.; vitrified clay pipe; segmental block; precast or monolithic concrete; 177,975 ft. 18 to 84-in.; 55 inlets; 5 manholes; 145 sq. yds. riprap, etc.; bids until Nov. 29; J. Montgomery, City Engr. (Lately noted voted \$260,000 bonds. (See Machinery Wanted—Sewers.)

### Shipbuilding Plants.

Tenn., Chattanooga.—Ship Repairs.—Bible Sand Co., Richard Hardy, Prest.; construct \$25,000 ways; side haul type; four cradles, each 35x25 ft., to run on tracks extending 100 ft. in water, 150 ft. up bank; land foundations of concrete; river foundations of broken stone; construct and repair boats, barges, etc., of maximum size 158 ft. long, 32 ft. wide, 1 ft. draft; Nichols W. Bowden and H. B. Springer, Engrs.

### Telephone Systems.

Ky., Eminence.—Henry Home Telephone Co. inctpd.; capital \$10,000; O. S. Pedue, W. M. Brown, G. E. Archer.

Tex., Greenville.—Greenville Telephone Co.; remodel telephone system; \$12,000.

### Textile Mills.

Fla., St. Augustine.—Silk.—American Silk Industry Co., Thos. De Pamphilis, Prest.; build factory; equip for 10,000 lbs. silk cocoons per crop.

Ga., Athens.—Cotton Yarns.—North Georgia Cotton Co. organized; capital \$100,000; W. T. Bryan, Prest.; John Hill, V.-P.; M. M. Bryan, Secy.; C. D. Cox, Treas.; has building; install equipment; purchased; mfr. spinable upland cottons; John Hill, Conslt. Archt.-Engr., Healey Bldg., Atlanta, Ga.

Ga., Lafayette.—Cotton Cloth.—Consolidated Textile Corp., American Exchange Natl. Bank Bldg., Greensboro, N. C., and 11 Thomas St., New York; construct addition to Union Mill; erect engine room and machine shop; \$15,000; West Point Iron Works, Contr., West Point, Ga.; install auxiliary engine and complementary equipment; \$15,000; Skinner Engine Co., Contr. for engine, Erie, Pa.; J. E. Sirrine & Co., Engrs.-Archts., Greenville, S. C. (Lately noted construct mill addition.)

Md., Baltimore.—Cotton Cordage, etc.—Wm. E. Hooper & Sons Co., Woodberry Ave.; construct 2-story plant addition; \$20,000; include boiler-room, tool shop, concrete-covered bridge to connect with main building; Herman F. Doelman, Conslt Engr., 507 N. Charles St.; invites bids.

N. C., Gastonia.—Combed Yarn.—Arkray Mills; erect yarn mill; reinforced concrete; main building 2 stories, 300x136 ft., with 1-story section 170x136 ft.; picker building, shipping-room, heating plant and switchboard-house; warehouse of 4 compartments, 50x104 ft., with opener-room and pressroom adjoining; individual chain-driven mchy.; initial installation 20,000 spindles; ultimate plant 40,000 spindles; Robert & Co., Engrs.-Archts., Atlanta, Ga.; Turner Construction Co., Contr., New York. (Previously noted inctpd. with \$1,500,000 capital by J. L. Gray and J. H. Separk.)

S. C., Columbia.—Cotton Products.—Oakland Cotton Mills; increase capital from \$400,000 to \$500,000.

S. C., Newberry.—Cotton Cloth.—Mollohon Cotton Mills; increase capital from \$500,000 to \$750,000.

S. C., Newberry.—Cotton Cloth.—Newberry Cotton Mills; increase capital from \$800,000 to \$1,000,000.

### Water-Works.

Ga., Lagrange.—City, S. H. Dunson, mayor; extend water-works; vote Dec. 16 on \$75,000 bonds.

Ga., Rebecca.—Town, W. K. Molt, Mayor; contemplates installing water-works. Super-sedes recent item. (See Machinery Wanted—Water-works.)

Okla., Clinton.—City, F. H. Palmer, Mayor; construct filter-house and coagulating basins

addition; lay cast-iron water mains, sewers, etc.; repair present filters; 238 cu. yds. reinforced concrete; 4000 lbs. cast-iron pipe, etc.; 4750 lbs. standard special H. & S. castings for water; bids until Dec. 2; Black & Veatch, Engrs., Mutual Bldg., Kansas City, Mo. (See Machinery Wanted—Water-works.)

Tex., Dallas.—Highland Park Water Co. inctpd.; capital \$150,000; E. L. Flippin, H. E. Prather, R. H. Morton.

Tex., Stamford.—City Comsn.; complete construction of dam across clear fork of Brazos River; \$50,000; three-fourths finished; invites bids.

Tex., Whiterock (R. D. from Celeste).—City, Fred Appel, Water Comms.; improve water-works; contemplates construction purification plant; \$450,000; David Morey, Jr., Water Engr.

### Woodworking Plants.

Fla., Orlando.—Lakeside Veneer Mills inctpd.; capital \$50,000; Lawrence Gentile, Prest.; A. S. Leed, V.-P.; W. A. Blackmon, Treas.; V. B. Newton, Secy.

Ky., Louisville.—Caskets.—United Casket Co., Gerrard Zimmerman, Prest., 31st and Chestnut St.; acquired 10,000 sq. ft. space in building; establish plant.

Mo., St. Louis.—Furniture.—Smith & Davis Mfg. Co., 1925 Locust St.; erect plant; brick and concrete construction; contemplated.

Okla., Tulsa.—Portable Houses.—Geo. O. Hollow Co., 222 Kennedy; Bldg. erect 40x70-ft. portable section house plant; \$2500. (See Machinery Wanted—Wall Board; Lumber; Hardware; Sash and Doors; Paints, etc.)

Tex., Breckenridge.—Wheels, etc.—City Planing Mill Co. (previously noted inctpd., capital \$9000) organized; A. Earle Butler, Prest.-Mgr.; Jas. A. Harley, V.-P.; Clyde Shaw, Secy.-Treas.; erect 32x64-ft. building; frame construction; install mchy.; mfr. wheels and bodies for cars, trucks, etc. (See Machinery Wanted—Engine.)

Tex., Fort Worth.—Boxes.—Thos. W. Halladay, Longview, Tex.; establish plant; mfr. boxes. (See Machinery Wanted—Woodworking Machinery; Motor.)

Tex., Houston.—Boxes.—Four-One Box Co. organized; Mawry and Quilman Sts.; capital \$40,000; Carroll J. Sherman, Prest.-Mgr.-Contr., 4200 Walker Ave.; Chas. T. Sherman, Treas.; Chas. H. Sherman, Secy.; has 200x40-ft. gable-roof building; install wire-bound mchy.; daily output 2000 wire-bound packing boxes and crates.

### Fire Damage.

Ala., Birmingham.—Mrs. K. T. Miller's residence, 1st Ave.

Ala., Birmingham.—Pisgah Home dormitory. Address The Supt.

Ala., Bay Minette.—Campbell Sanitarium.

Ala., Crichton.—C. F. Crawford's 2 dwellings, Burton Ave.

Ala., Hokes Bluff.—T. L. Barfield's store, grist mill and blacksmith shop.

Ala., Hartsboro.—T. G. Griswold's residence.

Ala., Laverne.—Smith-Hornsbey Motor Co.'s garage; loss \$16,000.

Ala., Montgomery.—Dan Fleming's residence, Fairview Rd.; loss \$10,000.

Ala., Troy.—C. Robinson's store, Elm St.; loss \$13,000.

Ga., Atlanta.—Frank E. Block Co.'s candy and cracker factory, 80 Elliott St.; loss \$75,000.

Ga., Reaves.—Seventh Day Adventists' Sanitarium; loss \$30,000.

Ga., Fitzgerald.—Henry A. Burkhardt's seed barn near Fitzgerald.

Ga., Lilburn.—J. S. Shettleworth's warehouse and lumber-yard and number of business buildings; loss \$75,000.

Ky., Louisville.—Louisville Rendering Co.'s River Road plant; loss \$58,000.

Ky., Owingsville.—Jno. Honaker's store.

La., Alexandria.—United States Public Health Service Hospital, Camp Stafford; loss \$250,000 to \$300,000.

Md., Brooklyn.—William G. Hudson's residence and garage, Hillcrest and Fourth Aves.

Md., Cockeysville.—Wm. H. DeC. Wright, 800 Cathedral St., Baltimore; country home near Cockeysville.

Md., Woodlawn.—William H. Everham's residence, Dogwood Rd.

Miss., Thornton.—Pruitt Hotel. Address The Proprietor.

Mo., Independence.—Frisbey Feed & Fuel Co.'s mill and office building; loss \$7000.

Mo., Kansas City.—Auto Salvage Co.'s buildings, 17th and Main Sts.; loss \$75,000.

Mo., Sikeston.—Southwest Missouri Fair Association's tables; loss \$25,000.

N. C., Albemarle.—City, J. A. Groves, Mayor; graded school.

N. C., Bouton.—Roland Lumber Co.'s plant.

N. C., Bowden via Warsaw.—Turnbull Lumber Co.'s plant; loss \$1,000,000.

N. C., Charlotte.—Mecklenberg Lumber Co.'s plant.

N. C., Greensboro.—J. R. Joyce's residence, 842 Worth Ave.

N. C., Greensboro.—Robt. T. Joyce's residence.

N. C., Hickory.—Home Canner Mfg. Co.'s plant; building owned by A. A. Whitener.

N. C., Salisbury.—Livingstone College dormitory.

Okla., Cardin.—Georgia Mining Co.'s mill; loss \$100,000.

Okla., Chickasha.—Dick Turpin's residence, 125 Iowa Ave.

Okla., Crecent.—John Favor's residence.

Okla., Oklahoma City.—Southwest Milling Co.'s plant, 1906 W. Main St.; loss \$7000.

Okla., Pawhuska.—City High School; loss \$50,000. Address City Board of Education.

S. C., Dillon.—A. K. McLellan's cotton gin; loss \$65,000.

S. C., Florence.—Mrs. Tallula Gibson's residence, loss \$25,000.

S. C., Manning.—N. K. Timmons' residence, near Manning.

S. C., Rock Hill.—Mrs. M. C. Caveney's residence, Hampton St.

S. C., Spartanburg.—T. C. Charles' greenhouses.

Tenn., Clarksville.—Jack Crouch's residence.

Tenn., Knoxville.—William J. Oliver's residence, Kingston pike.

Tenn., Troy.—Roberts Cotton Oil Co.'s cotton gin; loss \$5000.

Tenn., Jackson.—W. T. Rogers' residence, E. Main St.; loss \$10,000.

Tex., Austin.—Mrs. J. C. Lawrence's rooming-house, 2104 Tom Green St., owned by Tom Banks, Webberville; loss \$10,000.

Tex., Burnet.—City's office building, occupied by county officers, Burnett Bulletin and Marlin Telephone Co. Address The Mayor; Eleanor Churchill's business building.

Tex., Dodd City.—Bud Melton's cotton gin.

Tex., Driscoll.—Farmers' Supply Co.'s store.

Tex., Granbury.—Granbury Milling & Peanut Products Co.'s plant; loss \$500,000.

Tex., Houston.—Houston Packing Co.'s brick



and galvanized building, owned by Frederick Jones Produce Co.; 1105 Commerce Ave.; loss \$30,000; Gordon Sewall & Co.'s galvanized garage.

Tex., Kenedy. — Breeden-Runge Grocery Co.'s warehouse, owned by J. M. Nichols.

Tex., Paris.—P. J. Pierce's residence, Bonham St.; loss, \$25,000.

Tex., Manchaca.—S. P. Carpenter's cotton gin and warehouse.

Tex., Palestine.—E. G. Cude's cottonseed warehouse.

Tex., Rosser. — Oscar Jackson and J. W. Brooks' stores.

Tex., San Antonio.—Grayburg Oil Co.'s refinery; loss \$15,000.

Tex., Vernon.—White's Garage building; loss \$80,000.

Tex., Wichita Falls.—Ranger-Wichita Oil Co.'s refinery; loss \$100,000.

Va., Marion. — Mrs. Susie Crabtree's residence, Cemetery Hill.

Va., Richmond. — Laugham Apartments, West Floyd Ave.

Va., West Norfolk.—Hastings Bros.' terminal wharf; loss \$40,000.

W. Va., Clover Lick.—Paul Golden's sawmill; loss \$10,000.

W. Va., Huntersville.—J. H. Buzzard's barn, granary and other outbuildings; loss \$8000 to \$10,000.

## BUILDING NEWS

EXPLANATORY.

Buildings costing less than \$10,000 not covered in these reports.

### BUILDINGS PROPOSED

#### Apartment-Houses.

Fla., Miami.—Mrs. Ola B. McChesney; erect \$10,000 frame and stucco apartment-house. Rand St. and Virginia Ave.; 2 stories; 35x45 ft.

Fla., St. Petersburg.—W. L. Clark; erect apartment-house, 6th St. and 4th Ave. S.

Ky., Lexington.—N. P. Howard, Box 448; erect \$35,000 apartment-house; 6 suites; 30x60 ft.; fire-clay brick; tile and slate roof; hardwood and concrete floors; American Radiator steam and gas-heating plant; hollow fireproof tile; ornamental terra-cotta; interior tile; E. S. Stamler & Co., Archts., Fayette National Bank Bldg.; construction by owner. (Lately noted.)

Mo., St. Louis.—E. C. Fendler, 4466 Arsenal St.; erect \$12,000 apartment-house, 3341 Potomac St.; 2 stories; 34x46 ft.; brick; plans and construction by owner.

#### Association and Fraternal.

Fla., Orlando.—Orlando Lodge Masons, Knights Templar and Shriners; erect \$100,000 temple jointly; 3 stories; stores on first floor.

Ga., Augusta.—Elks' Lodge, D. A. Whiteley, Mgr.; erect \$100,000 home.

Ga., Columbus.—Elk Lodge, Dr. Gordon F. Chambers, Chrmn. Comm.; expend \$10,000 to remodel and erect addition to building, 1028 Front St.

Ky., Louisville.—Korsair Temple, Geo. L. McDonald, Chrmn. Comm., Starks Bldg.; plans to erect \$500,000 temple, 1122-24 S. 3d St.; kiosk type; 2 stories and basement; clubrooms, offices, auditorium, banquet hall, kitchen, etc.

Ky., Morehead.—Masonic Lodge, H. L. Wilson, Secy.; erect \$30,000 building; 2 stories and basement; 30x65 ft.; brick, limestone trim; J. W. King, Archt., Ashland.

La., Plaquemine.—Elks' Lodge, D. J. Molaison, Secy.; expend \$20,000 to convert building into home; 42x72 ft.; brick; galvanized roof; hardwood oak floors; electric lights. Bids opened Dec. 15. (Lately noted.)

Mo., Springfield.—Gate of Temple and Vincel Chapter Lodges, A. F. & A. M., Emmett Cavin, Chrmn. Comm.; erect \$45,000 temple, Booneville and Pacific Sts. (Lately noted.)

Mo., St. Louis.—Knights of Columbus, L. E. Hart, Chrmn. Comm., La Salle Bldg.; plan to erect \$1,000,000 clubhouse, Lindell Blvd.

N. C., Asheville.—Young Women's Christian Association, Ava B. Blank, campaign director; erect \$75,000 home.

Okla., Tulsa.—Knights of Pythias, E. F.

Black, Chrmn. Building Comm.; erect \$90,000 building, 12th and Main Sts.

Tex., El Paso.—Young Men's Christian Assn., H. T. Ponsford, Chrmn. Comm.; plans to erect 1-story addition to building.

Tex., Fort Worth.—Young Women's Christian Association; erect activities building; site 95x100 ft.; plans to later erect residence home; Sanguinet & Staats, Archts., First National Bank Bldg.

Tex., Houston.—Young Women's Christian Association; plans to erect building.

Va., Alexandria.—Ancient Free and Accepted Masons; plan to erect \$2,000,000 George Washington memorial building.

Va., Norfolk.—Young Men's Hebrew Assn., Michael Cooper, Chrmn. Bldg. Comm.; erect home.

#### Bank and Office.

Md., Baltimore.—Louis Hurwitz, 248 Equitable Bldg.; erect 8-story brick office building, 219 Courtland St.; John Freund, Archt., 1307 St. Paul St.

Mo., Kansas City.—O. O. Snyder; erect office building and garage, 71st and Wornall Sts.; 1 story and basement; 19x32 ft.; brick veneer; C. E. Shepard, Archt., 508 Reliance Bldg.; day labor.

N. C., Charlotte.—Drs. C. B. Bryant and E. C. Griffith; convert Colonial Apartments, Tryon and 9th Sts., into physicians and doctors' office building; 3 stories; 60 rooms.

Okla., Seiling.—Seiling State Bank, W. L. Pittman, Prest.; bids until March 1 to erect 1-story-and-basement building; 24x48 ft.; tile and brick; composition roof; hardwood floors; hollow fireproof tile; metal ceilings; interior tile; vaults; U. G. Charles, Archt., Wichita, Kansas. (Lately noted.)

Okla., Tulsa.—Thompson Bros. & Hughes; erect \$750,000 office building; 12 stories and basement; reinforced concrete; fireproof; 80x140 ft.; reinforced concrete roof and floors; vacuum steam heat; electric lights; Bass, Knowlton & Graham, 801 Hume-Mansur, Indianapolis, Ind., lately noted as Archts., write Manufacturers Record: "Building postponed until spring."

Tenn., Paris.—First National Bank, C. B. Aden, Cashr.; interested in erection of bank and office building.

W. Va., Clarksburg.—Curtis E. Prunty; plans to erect 11-story office building, S. 3d St. and Modoc alley.

W. Va., Fairmont.—Bethlehem Coal Co.; convert Manley Hotel into office building.

#### Churches.

Fla., Plant City.—Methodist Church, E. T. Roux, Chrmn. Bldg. Comm.; plans to erect building.

Ky., Collins.—Buckfield Coal Co.; erect church. (See Dwellings.)

Md., Baltimore.—Emmanuel English Lutheran Church, Rev. Paul F. Bente, Pastor, 2516 Edmondson Ave.; purchased site Warwick and Arunah Aves.; plans to erect parish hall.

N. C., Clemmons.—Moravian Church, Rev. Jas. E. Hall, Pastor; R. H. Hunter, Chrmn. Comm.; erect building.

Tex., Dublin.—Methodist Church; erect \$30,000 addition; W. C. Meador, Fort Worth, Archt. and Supvr. of Constr.

Va., Charlottesville.—Holy Comforter Catholic Church, Rev. Thos. A. Rankin, Pastor; will not erect addition to building as lately noted.

Va., Lynchburg.—First Presbyterian Church, Rev. Dr. J. D. Paxton, pastor, 707 Clay St.; alter and erect addition to building; frame; Craigbill & Cardwell, Archts., People's Bank Bldg.

Va., Norfolk.—Park Place Baptist Church; erect frame Sunday-school room, Colonial Ave. and 31st St. Address The Pastor.

W. Va., Bluefield.—Thos. G. Howard interested in erection church of North Rd.; 2 stories and basement; 23x30 ft.; brick; Alex. B. Mahood, L. & C. Bldg.

W. Va., Hinton.—H. Rus Warne, 13 Masonic Temple, Charleston; prepared plans for \$75,000 church; 2 stories and basement; 100x60 ft.; stucco on stone.

W. Va., Welch.—Presbyterian Church; erect \$40,000 building; 2 stories and basement; 36x80 ft.; limestone; Alex. Mahood, Archt., L. & C. Bldg., Bluefield.

#### City and County.

Ala., Selma.—City Stables.—Public Building Comm., J. W. Robinson, Chrmn.; erect addition to city stables; plans and specifications at office of City Clerk.

Fla., Tarpon Springs.—Municipal Buildings, etc.—City voted on \$226,000 bonds for improvements, including municipal buildings. Address The Mayor.

Ga., Lagrange.—City, S. H. Dunson, Mayor; votes Dec. 16 on \$670,000 bonds, including \$50,000 for city hall, jail and auditorium; \$10,000 for addition to Dunson Hospital; \$200,000 for school buildings.

Md., Baltimore.—Pavilion.—Board of Park Commrs., J. V. Kelly, Secy.; bids received until Dec. 1 by Board of Awards, City Register's Office, City Hall, to furnish material and complete pavilion, Clifton Park; brick, terra-cotta, frame, iron and metal; slate roof; tile and concrete floors; hollow fireproof tile; interior tile; Josias Pennington, Archt., Professional Bldg.

Tex., Plainview.—Auditorium, etc.—Board of City Development, J. B. Maxey, Chrmn. Comm.; promoting erection of \$100,000 city auditorium and community-house.

#### Courthouses.

Tex., Seminole.—Galnes County Commrs., Court, T. O. Stark, County Judge; bids until Dec. 13 to complete courthouse and jail building; plans and specifications at office of Sanguinet & Staats, Archts., First National Bank Bldg., Fort Worth.

W. Va., Logan.—County Commrs.; expend \$40,000 to remodel courthouse; W. B. Smith, Archt., R. & P. Bldg., Huntington.

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

**Dwellings.**

Fla., Daytona.—P. Mathews, Spartanburg, S. C.; erect residence.

Fla., Daytona.—Edward Holland, Asheville, N. C.; erect bungalow.

Fla., Daytona.—W. F. Fotam, Greenfield, Miss.; erect residence.

Fla., Daytona.—E. J. Hester, Asheville, N. C.; erect residence.

Fla., Daytona.—J. M. Childs, Kenilworth Inn, Asheville, N. C.; erect 6 bungalows.

Fla., Miami.—Halsema Bros.; erect 2 bungalows, block 18, Lawrence Estate.

Fla., Miami.—Dr. Harry A. Lawton; erect frame residence and garage, 2939 Bricknell Ave.

Fla., Palm Beach.—William Waters; erect residence, South Palm Beach; Thos. Elsfeldt, Lake Worth, Contr. for millwork.

Fla., Palm Beach.—F. H. Clements; erect residence; Spanish design; Addison Mizner, Archt.; Thos. Elsfeldt, Lake Worth, Contr. for millwork at \$40,000.

Fla., Plant City.—S. D. Adelson; erect 6-room frame residence, lately noted; imitation shingle roll roof; wood floors; hollow fireproof tile; plaster board; ornamental terra-cotta; F. W. Nulter, Archt.; construction by owner. (See Machinery Wanted—Mantel; Roofing; Hardware.)

Fla., St. Petersburg.—A. L. Pfou, Jr., P. O. Box 1852; erect 3 bungalows, 8th St. and 5th Ave. north; \$15,000; 26x44, 32x41, 29x40 ft.; frame and stucco; paper shingle roofs; hard pine and tile floors; hollow fireproof tile; metal ceilings; plaster board; ornamental terra-cotta; interior tile; metal doors; steel and sash trim; plans and construction by owner; plans other dwellings. (Lately noted.)

Ky., Ashland.—H. R. Dyoard; erect \$12,000 residence, 16th St.; 2 stories and basement; 38x38 ft.; brick, limestone trim; J. W. King, Archt.

Ky., Collins.—Four Seams Collieries Co.; construct 20 miners' houses, tippie, and make other improvements.

Ky., Collins.—Buckfield Coal Co.; erect 12 miners' houses; contract in 2 weeks; also erect church and school.

Ky., Elwood.—Kentucky Block Fuel Co.; erect 12 miners' houses.

Ky., Esco.—Elkhorn Creek & Shelby Coal Co.; construct 20 miners' houses; contract let at once.

Ky., Providence.—M. C. Palmer; erect 2-story brick residence; 50x44 ft.; asbestos roof; pine floors; hot-water heat \$700; electric lights \$500; Clifford Shopbell Co., Archt., Furniture Bldg., Evansville, Ind.; day labor. (Lately noted.)

Ky., Virgie.—J. B. Elkhorn Coal Co.; erect 12 miners' houses and power-house; contracts let at once.

La., New Orleans.—Wm. B. O'Brien; erect 1-story bungalow, Laurel and Calhoun Sts.

La., Thibodaux.—Lafourche Lumber Co., Geo. F. Payne, Mgr.; plans to erect number of dwellings.

Md., Baltimore.—Daniel Shipley, 1104 W. 36th St.; erect 3 two-story brick dwellings, 3528-30-34 Hickory Ave.; \$12,000.

Md., Baltimore.—Harry Shapiro, 27 W. Baltimore St.; erect \$16,000 residence, Milton and Springdale Aves.; Fredk. E. Beall, Archt., 1335 N. Gilmer St.

Md., Baltimore.—Frank O. Singer, Jr., Harford Rd. and 25th St.; erect 2 frame dwellings, 2808-10 Loudon Ave.; \$14,000.

Md., Baltimore.—Northwest Realty Co., Geo.

R. Morris, Prest., Morris Bldg., Charles and Saratoga Sts.; erect 7 dwellings, Ashburton; 1½ and 2½ stories; \$31,500; frame; slate roof; wood floors; steam heat; electric lights; plans and construction by owner. (Lately noted.)

Mo., Kansas City.—W. E. Wood; erect \$30,000 residence; 2 stories and basement; 40x70 ft.; brick and stone; composition roof; Smith, Rea, Lovitt & Senter, Archts.

Mo., St. Louis.—J. G. T. Spink, 1002 Olive St.; erect \$25,000 residence; 2 stories; 77x34 ft.; brick and stone; J. W. Leigh, Archt., Odd Fellows Bldg.

Mo., St. Louis.—J. W. Leigh, Odd Fellows Bldg.; prepare plans for \$18,000 residence, Lindell St., near Pennsylvania Ave.; 3 stories; 35x41 ft.; brick.

Mo., St. Louis.—John Glenn, 202 Grand Ave.; erect \$12,000 residence, Lindell St. nr. Pennsylvania Ave.; 2 stories; 38x33 ft.; brick; Wm. P. McMahon, Archt., Title Guaranty Bldg.

Mo., St. Louis.—G. P. Schake, 4135 Chippewa St.; erect \$10,000 residence, 5254 Itaska St.; 1 story; 27x52 ft.; brick; plans and construction by owner.

Mo., St. Louis.—J. B. McIntire; erect \$10,000 residence, Westminster Ave.; 2 stories; 25x31 ft.; brick; Leonard Hager, Archt., 3944 Utah Place.

Tex., Agatite.—American Cement Plaster Co.; erect 100 employees' dwellings.

Tex., San Antonio.—W. H. Hearn; erect 5-room dwelling, Woodlawn Ave.

Tex., San Antonio.—R. Huffington; erect 6-room dwelling.

Tex., Sherman.—H. N. Jackson; erect dwelling, 1300 S. Walnut St.

Tex., Sherman.—Dan W. Parrigan; erect residence, E. Lamar St.

Va., Galax.—F. L. Phillips; erect \$10,000 residence; 2 stories and basement; 40x35 ft.; frame and shingle; M. J. Garry and Robt. A. Sheffey, Archts., L. & C. Bldg., Bluefield, W. Va.

Va., Norfolk.—David W. Godwin; erect frame residence, 27th St.

W. Va., Charleston.—Kelly Axe Co.; plans to erect number dwellings.

W. Va., Charleston.—Dunbar Land Co.; erect 20 dwellings.

W. Va., Clarksburg.—E. C. Hess; erect 2-story residence, Grove Ave.; brick; slate roof; 6 rooms; construction by owner.

W. Va., Charleston.—Ethel 'Ruffner; erect \$25,000 dwelling; 2 stories and basement; 40x30 ft.; brick and stone; Higgenbotham & Knapp, Archts., Charleston Natl. Bank Bldg., Charleston, W. Va.

W. Va., Huntington.—J. H. Murray; erect \$60,000 dwelling; 2 stories and basement; 45x45 ft.; brick and stone; Meanor & Handloser, Archts., R. & P. Bldg.

W. Va., Huntington.—Huntington Home Building Co., 418 10th Ave.; erect 4 dwellings; 2 stories; 27x30 ft.; brick; \$10,000 each; R. M. Bates, Jr., Archt., First Natl. Bank Bldg.

W. Va., Huntington.—Dr. C. R. Enslow; erect \$15,000 dwelling; brick and stone; 2 stories and basement; 32x45 ft.; W. Francis Diehl, Archt., R. & P. Bldg.

W. Va., Macomas.—American Coal Co.; erect 30 dwellings; 2 stories and basement; 24x24 ft.; frame; \$3000 each; day labor.

W. Va., Weston.—Dr. Hale; erect \$10,000 residence; 2 stories and basement; 32x40 ft.; brick; Albert Breternitz, Archt., Clarksburg.

W. Va., Wheeling.—Jas. B. Luttrell; erect \$10,000 frame residence, Edgington Lane.

W. Va., Wheeling.—D. A. McGregor; erect residence.

**Hospitals, Sanitariums, Etc.**

Ga., Lagrange.—City, S. H. Dunson, Mayor; votes Dec. 16 on \$670,000 bonds, including \$10,000 for addition to Dunson Hospital. (See City and County.)

Ga., Savannah.—Chatham-Savannah Tubercular Assn.; erect sanitarium, La Roche Ave.

Ky., Cynthiana.—Harrison County Memorial Hospital, W. T. Hammon, Prest.; erect \$100,000 building; 2 stories and basement; brick, stone trim; concrete floors; slab roof; J. T. Gillig, Archt.

Ky., Paducah.—City Commrs.; plan to convert 3-story brick building, 4th and Clay Sts., into hospital.

Tenn., Nashville.—Board of Managers, Davidson County Tuberculosis Hospital; remodel doctors' and nurses' dining-room building, Buena Vista Pike; Amus & Clark, Archts., 634 Stahlman Bldg.; bids opened Nov. 18.

Tex., Fort Worth.—Tarrant County Baptist Assn., County Judge Hugh L. Small interested; erect first unit of \$1,000,000 hospital, Peter Smith block, between St. Louis and Main Sts.; 100 beds.

**Hotels.**

D. C., Washington.—Virginia Hotel Co., Thos. B. Love, Prest.; erect 10-story and basement annex to Willard Hotel, 1414 F St. N. W.; 40x90 ft.; \$400,000; Marsh & Peters, Archts., 522 13th St. N. W.; Geo. A. Fuller Co., Munsey Bldg., lately noted having contract, writes to Manufacturers Record: "Awarding contract indefinitely postponed."

Fla., Daytona.—Dr. Dean T. Smith; rebuild Greystone Hotel.

Md., Salisbury.—Shoreman Hotel Corp., Jesse D. Price, Prest.; erect \$200,000 hotel; 84x85 ft.; 8 stories; 110 bedrooms, 67 with bath; tapestry brick; limestone trim; steam heat; electric lights; cement sidewalks; Theo. Wells Pietsch, Archt., 1210 American Bldg., Baltimore, writes Manufacturers Record: "Building postponed until spring." (Previously noted.)

Tex., Denison.—Chamber of Commerce, W. N. King, Secy.; promoting company to erect \$250,000 hotel; 40x100 ft. and 80x90 ft.; concrete; 5-ply gravel roof; interior tile; cement floors; 1-pipe low-pressure steam heat; electric lights; metal doors; mail chutes; passenger elevator. Address Eric E. Hall, 123 W. Madison St., Chicago. (Lately noted.)

Tex., Waxahachie.—Robert Harrison; promoting erection of hotel.

**Miscellaneous.**

Ky., Louisville.—Home.—E. T. Hutchings, Archt., 310 Columbia Bldg.; taking bids for repairing old ladies' home, Morton Ave.; brick; 3 stories.

Mo., Jefferson City.—Pavilion.—Missouri State Fair Assn.; erect swine pavilion; 300x300 ft.; 700 pens 8x8 ft.; steel, concrete and brick; \$175,000.

Mo., Normandie.—Orphanage.—St. Vincent's German Orphan Home; erect pavilion, shed and poultry-house; 1 story; 35x35, 36x50 and 16x40 ft.; frame; \$10,000; Wessbecker & Hillebrand, Archts., Pontiac Bldg., St. Louis; day labor.

N. C., Asheville.—Biltmore Estate Co., Thos. W. Raoul, Prest.; erect \$30,000 clubhouse; swimming pool, 45x120 ft.; construct golf course, 2 mi. of road, etc.; Edw. L. Palmer, Jr., Archt., 513 N. Charles St., Baltimore, Md.; Donald Ross, Pinehurst, N. C., supervise construction of golf course. (Previously noted.)

Tenn., Knoxville.—Board of Control, Lewis S. Pope, Mgr.; bids until Nov. 25 to construct

Tubercular Hospital, Lyons View; plans and specifications at office Albert B. Baumann, Archt., 713 Henson Bldg.

W. Va., Huntington.—Library.—Carnegie Library Comm., H. A. Lawrence, Chrmn.; remodel building; W. A. Meanor, Archt.

### Schools.

Fla., West Palm Beach.—Palm Beach County Board of Public Instruction, W. E. Keen, Supt.; erect 3 cement block schools in districts Nos. 1 and 4; \$165,000 bonds sold. (Previously noted.)

Ga., Lagrange.—Lagrange College W. E. Thompson, Prest.; erect several buildings.

Ga., Lagrange.—City, S. H. Dunson, Mayor; votes Dec. 16 on \$670,000 bonds, including \$200,000 for school buildings. (See City and County.)

Ga., St. Simons Island.—County Board of Education, Brunswick; erect school at Atlantic Refinery Co.'s plant.

Ky., Collins.—Buckfield Coal Co.; erect school. (See Dwellings.)

Ky., Lexington.—Kentucky Society, Daughters of American Revolution, Christopher Chenault, Chrmn.; plans to erect school; 1 or 2 stories; probably brick.

Ky., Owensboro.—Davies County Board of Education; plans to consolidate district, including Reeds, Thurston, Mt. Vernon, Rose Hill, Wrights and Seven Hills districts; erect school nr. Owensboro; electric lights; steam heat.

Md., Baltimore.—Board of Awards, Wm. F. Broening, Prest.; rejected bids to erect schools Nos. 76, Latrobe Park, and 64, Penhurst and Garrison Aves.; revise plans and call for new bids; Otto G. Simonson, Maryland Casualty Tower, Archt. for former structure; Mottu & White, 322 N. Charles St., Archts. for latter. (Lately noted.)

Md., Deals Island.—Somerset County School Commrs., Wm. H. Deschields, Secy., Princess Anne; erect high school; 2 stories; 120x50 ft.; frame; Brinckloe & Co., Archts., Easton.

Mo., St. Louis.—Washington University; erect \$100,000 school, Skinner and Lindell Sts.; erect building; 3 stories; 35x85 ft.; brick and reinforced concrete; Cann & Corrubia, Archts., De Menil Bldg.

N. C., Ayden.—Free Will Baptist Church; erect \$300,000 college; 3 buildings; brick; electric lights. Address R. F. Pittman, Secy. Building Comm. (Previously noted.)

N. C., Morehead City.—Morehead City Graded School Dist., C. S. Wallace, Chrmn. Board of School Trustees; voted \$65,000 bonds.

Okl., Goodwell.—Panhandle Agricultural Institute; erect \$20,000 dormitory; accommodate 50 students.

S. C., Greer.—City Board of Education; erect \$125,000 school.

Tex., Dallas.—Board of Education; erect Forest Ave. and Oak Cliff high schools, Winnetka Grade School, Mount Auburn school and Austin school; Wm. B. Ittner, Archt., Board of Education Bldg., St. Louis. (Previously noted.)

Tex., Gainesville.—City, S. A. Bryan, Secy.; bids until Dec. 7 to select architect to prepare plans for remodeling and erecting high school.

Tex., San Marcos.—Southwest Texas State Normal College; erect gymnasium; 74x104 ft.; basement 40x50 ft.

Tex., Wichita Falls.—Board of Education; erect school for 300 students; also additions to 2 schools; \$100,000.

Tex., Woodville.—Woodville Independent School Dist. Trustees; erect high school; \$75,000 bonds voted.

W. Va., Bakersville.—Boliver District Board of Education, D. H. Nichols, Clk., Harpers Ferry; erect school; 1 story and basement; 70x70 ft.; Holmboe & Pogue, Archts., Empire Bldg., Clarksburg.

W. Va., Huntington.—Board of Education, H. C. Walburn, Prest.; remodel library building; 2 stories and basement; brick and stone; \$17,000; Meanor & Handloser, Archt., R. & P. Bldg.

W. Va., Keyser.—J. E. Rembold; erect store and apartment building; 2 stories; 30x60 ft.; frame with stucco finish; slate surfaced shingle roof; hardwood and concrete floors; plaster board; stoves; electric and gas lights; \$10,000. Address W. A. Liller, Archt.

### Stores.

Ky., Royalton.—Dawkins Lumber Co., Ashland, Ky.; erect store; 1 story and basement; 40x100 ft.; frame; J. W. King, Archt., Ashland; construction by owner.

Va., Norfolk.—W. W. Marshall; erect brick business block, 35th St. nr. Granard St.; 1 story.

W. Va., Huntington.—O. L. Standard Dry Goods Co.; erect 7-story building; 60,000 to 70,000 ft. floor space; \$100,000.

W. Va., Kimball.—Harry Bank; erect building for store, apartments and warehouse; 2 stories and basement; 32x80 ft.; brick and stone; \$25,000; Wysong, Tufts & Jones, Archts., Odd Fellows' Bldg., Charleston. (Previously noted.)

## BUILDING CONTRACTS AWARDED

### Apartment-Houses.

Md., Baltimore.—Harold C. Hann, 111 N. Charles St.; promoting erection of apartment-house, University Parkway nr. Wyman Park; tentative plans provide 7-story structure on site 240x320 ft.; brick and steel; \$1,500,000; Piel Construction Co., Edmondson and Witmore Aves., lately noted as Contr., writes the Manufacturers Record: "Construction deferred until probably next spring."

### Association and Fraternal.

Okl., Norman.—Phi Gamma Delta Housing Assn.; erect \$75,000 fraternity-house; 43x105 ft.; 3 stories and basement; reinforced concrete, hollow tile, brick and stone; fireproof; Johns-Manville asbestos roofing; reinforced concrete slab and hardwood floors; steam heat; electric lights; interior tile; ventilators; Kemper Nomland, Archt., 312 Southwest Natl. Bank Bldg., Oklahoma City; Manhattan Constr. Co., Contr., Muskogee. (Lately noted.)

Md., Baltimore.—Westphal & Schoenhals; erect 23 two-story brick dwellings, 2201-2245 W. Lexington St.; \$55,000; Jos. F. Hirt, Contr., 837 N. Luzerne Ave.

### Bank and Office.

La., Lafayette.—Bank of Lafayette; alter building, Jefferson and Congress Sts.; Hoggson Bros., Contrs., 455 Fifth Ave., New York. (Lately noted.)

La., New Orleans.—General Carbonic Co. and Crescent City Carbonic Co.; erect brick office and boiler-house, Felicity and St. Thomas Sts.; Chas. Pfister, Archt.-Contr.

S. C., Greenville.—Woodside Securities Co.; erect \$1,500,000 bank and office building; 17 stories; 62x200 ft.; fireproof; steel frame, brick walls; steel columns and floor girders; concrete foundation; 3 stories and loggia of Georgia marble; refrigerating plant; composition roof; vacuum heating plant; electric lights; hollow fireproof tile; ornamental terra-

### Theaters.

Ga., Atlanta.—Bonita Theater Co.; remodel 3-story building at 34-36 Peachtree St. for motion picture and vaudeville theater; fireproof; seating capacity 1200.

Md., Baltimore.—American Theaters Co.; erect motion-picture theater, 33d St. nr. Blvd.; 200x78 ft.; 1 story; brick; stone trim; slag roof; reinforced concrete floors; steam heat; seating capacity 1500; contract let in about 2 months; \$200,000; E. G. Blanke, Archt., 213 N. Calvert St.

### Warehouses.

Ky., Henderson.—Tri-County Tobacco Warehouse Co. Inceptd.; \$30,000 capital; W. H. Soaper, Lucy S. Soaper, both Henderson; E. K. Short, Owensboro.

Ky., Owensboro.—Rapier Sugar Feed Co.; erect concrete warehouse, Center St. and the river.

Mo., Kansas City.—United States Register Co., J. R. Payne, Mgr., 510 W. 5th St.; erect warehouse, 330-32 W. 5th St.; brick; stone trim; R. H. Sanneman, Archt., Reserve Bank Bldg., taking bids.

Tex., San Antonio.—Mission Ice & Fuel Co.; erect warehouse.

Tex., San Antonio.—Southern Ice & Cold Storage Co.; erect warehouse.

Va., Martinsville.—R. J. Reynolds Co.; erect tobacco-storage house on Lester St.

cotta; safes; interior tile; metal doors; vaults; wire glass; mail chutes; concrete floors; vault lights; steel and sash trim; Otis elevators; Mowbray & Uffinger, Archts., 56 Liberty St.; Chas. T. Wills, Inc., Contr., 286 5th Ave., both New York. (Previously noted.)

Tex., Mt. Calm.—First State Bank and A. F. & A. M.; erect \$20,000 building to replace burned structure; 2 stories; 40x50 ft.; brick; composition roof; concrete and hardwood floors; hot-air heat; electric lights; steel stairway; metal ceilings; plaster board; interior tile; rolling partitions; wire glass; ventilators; Rabe Wilson, Contr., Waco. Address First State Bank. (Lately noted.)

Va., Norfolk.—York Boush Corp., H. B. Caldwell; erect \$570,000 building, York and Boush Sts.; 53x121 ft.; 12 stories; 6 stories on street level; 200 offices on remaining floors; 4 upper floors especially equipped for physicians; reinforced concrete, brick and stone; terra-cotta trim; concrete floors; hollow fireproof tile; interior tile and marble; wire glass; mail chutes; Herts & Robertson, Archts., 331 Madison Ave.; E. W. Minter Co., Inc., Contr., 115 Broadway; W. G. Cornell Co., Contr., for heating and plumbing, 45 E. 17th St.; Otis Elevator Co., Contr. for elevators, 11th Ave. and 26th St.; Cortland Engr. Co., Contr., for electric wiring; all New York. (Previously noted.)

### Churches.

Fla., Clearwater.—Peace Memorial Presbyterian Church, Dean Alvord, Chrmn. Com.; erect building, S. Fort Harrison Ave. and Pierce St.; hollow tile and stucco; Winnard & Adams, Archts., Tampa; Walker & Frisbie, Contrs.

Mo., St. Louis.—St. Michael's Church, Rev. Jos. Preuss, Pastor; erect \$20,000 teachers' home; 2 stories; 37x33 ft.; Louis Preuss, Archt., 4208 Lenox Ave.; Leuburger & Summerfield, Contrs., all Shrewsbury Park. (Lately noted.)

Va., Norfolk.—Beth El Congregation; erect



\$250,000 synagogue; Herts & Robinson, Archts., 331 Madison Ave.; E. W. Minter & Co., Contrs., 115 Broadway; both New York. (Previously noted.)

### Dwellings.

Fla., Miami.—G. W. Gabel, 925 Avenue C; erect 100 dwellings; contract let.

Fla., Tampa.—W. L. Taylor; erect frame residence, 307 S. Newport Ave.

Fla., Tampa.—Dr. Marshall L. Bize; erect frame dwelling, 846 S. Delaware Ave.

Fla., Tampa.—C. S. Hyers; erect \$10,000 dwelling, 812 S. Oregon Ave.; 2 stories; frame.

Md., Baltimore.—Justus Dohme, 4107 Main Ave.; erect \$10,000 residence, 4103 Main Ave., Arlington; frame; 2½ stories; 29x48 ft.; slate roof; steam heat; plans by owner; C. C. Watty, Contr. (Lately noted.)

Md., Baltimore.—Arthur L. Devers, 595 N. Gay St.; erect four 2-story frame dwellings, Belford Rd., near Maple St.; 24x26 ft.; \$12,000; Geo. Gaines, Contr., 3114 Ellerslie Ave.

Md., Catonsville.—Mohler Bros., 713 American Bldg., Baltimore; erect 2 residences, Summit Park; 2 stories; \$10,000 each; Walter Grady, Contr., 736 Frederick Ave., Catonsville.

Mo., North Kansas City.—Armour-Swift-Burlington Co.; erect 50 bungalows; \$2250 each; 4 and 5 rooms; Zurn Building & Investment Co., Contrs.

Okla., Tulsa.—Robert Galer; erect \$15,000 residence, 1715 S. Newport St.; 38x70 ft.; brick; shingle roof; oak floors; heating plant, \$500; Bass, Knowles & Reynolds, Archts.; Geo. O. Hollow Co., Contr., 222 Kennedy Bldg.

Va., Lyon Park.—Lyon & Fitch, Clarendon; erect number residences; 2 stories; \$10,000 each; C. W. Fitch, Contr., Clarendon.

Va., Portsmouth.—Mrs. Honora Z. Lewis; erect \$10,000 residence, Hampton Court, Tanner's Creek district; brick and frame; 7 rooms; R. W. Stefford, Contr.

W. Va., Bluefield.—F. S. Easley, L. & C. Bldg.; erect \$30,000 dwelling; 2 stories and basement; 50x30 ft.; brick; Alex. B. Mahood, Archt., L. & C. Bldg.; Larken Williams, Contr.

W. Va., Bayard.—Emons Coal Co.; erect \$10,000 residence; 2 stories and basement; 36x28 ft.; plans by owner; W. A. Liller, Contr., Keyser.

### Government and State.

Fla., Buena Vista—Postoffice.—D. P. Davis, United Realty Co.; erect \$20,000 postoffice to be leased by Government; concrete; Henry La Pointe, Archt.; P. J. Davis, Contr.; both Miami.

La., New Orleans—Storage Building.—Bureau of Yards and Docks, C. W. Parks, Ch.,

Navy Dept., Washington, D. C.; erect mine-storage building; specification No. 4253; Hyde & Baxter, Contrs., 1311 G St. N. W., Washington. (Lately noted.)

Mo., St. Louis—Post Office.—Mound City Trust Co., St. Louis and Union Aves.; erect \$55,000 building to be leased by Government; 2 stories; 30x80 ft.; fireproof; brick and terra cotta; Wedemeyer & Nelson, Archts., Wainwright Bldg.; T. H. Ratz, Contr., 917 Pine St. (Lately noted.)

### Hospitals, Sanitariums, Etc.

Mo., St. Louis.—Lutheran Hospital, Louise Amer. Supt., 3500 Ohio Ave.; erect \$125,000 addition to building; 4 stories and basement; 40x120 ft.; H. J. Burdorf, Archt., 2604 Virginia Ave.; N. C. Bartels, Contr., 4208 Gravois Ave. (Previously noted.)

### Hotels.

Ga., Atlanta.—Wade H. Davis; expend \$75,000 to improve Leland Hotel, Houston St.; 60 rooms; terra-cotta and pressed brick; J. W. Jenkins, Archt.-Contr.

W. Va., Monticello.—Monticello Smokeless Coal Co.; erect 2-story and basement hotel; 30x46 ft.; West Virginia Housing Corp., Contr., Davidson Bldg., Charleston, W. Va.

### Railway Stations, Sheds, Etc.

Okla., Ada.—St. Louis-San Francisco R. R., F. G. Jonah, Ch. Engr., Railway Exchange Bldg., St. Louis; erect \$40,000 freight station; 1 story; 30x140 ft.; brick; covered platform, 260x16 ft.; Kelly-Atkinson Construction Co., Contr., 189 W. Madison St., Chicago, Ill.

### Schools.

La., Lockport.—Lafourche Parish School Board; erect two 4-room schools; contracts let.

Md., Baltimore.—Maryland School for Blind, 601-11 N. Fulton Ave.; erect 2-story brick building; 94x50 ft.; slag roof; \$30,000; John E. Marshall & Son, Contrs., 117 South St.

Md., Baltimore.—Board of Awards, Wm. F. Broening, Prest.; erect School No. 112, Laurens and Calhoun Sts.; fireproof; reinforced concrete floors; brick partition walls; \$332,532; Francis E. Tormey, Archt., 72 Gunther Bldg.; J. L. Robinson Construction Co., Contr., 1130 W. Lafayette Ave. (Lately noted.)

N. C., Albemarle.—City, J. A. Groves, Mayor; rebuild graded school noted burned; 60x75 ft.; 40x60-ft. addition; brick; gravel roof; D. A. Halbrooks, Contr.

Va., Lynchburg.—Virginia Theological Seminary and College; erect \$100,000 administration building; 3 stories; 80x100 ft.; brick; terra-cotta trim; R. C. Archer, Jr., Archt., 629 Church St., Norfolk; Bowling & Forbes, Contr.,

513 Jackson St., Lynchburg. (Previously noted.)

### Stores.

Ky., Louisville.—S. S. Kresge Co., Ray Cummings, Supt. of Constr., 1815 Kresge Bldg., Detroit, Mich.; remodel store, 434 Fourth Ave.; \$60,000; D. X. Murphy & Bro., Archts., Louisville Trust Bldg.; Platoff & Bush, Contrs., 120 W. Liberty St.; both Louisville. (Lately noted.)

Mo., Kansas City.—J. A. Kelley and Dr. Sylvester, 409 New England Bldg.; erect \$15,000 store, 10th and Oak Sts.; 1 story and basement; 40x132 ft.; Harry Jacobs, Archt., 3314 College Ave.; Hoffman Construction Co., Contr., 524 Ridge Bldg.

Mo., St. Louis.—H. & W. Schere, 5995 Easton Ave.; erect \$50,000 store; 2 stories; 66x129 ft.; Koerner Engineering Co., Structural Engr., Odd Fellows' Bldg.; Geo. Kelling, Contr., 5592 Easton Ave.

### Theaters.

Ga., Macon.—C. H. Douglas, 363 Broadway; erect \$35,000 theater, office and store building lately noted; 3 stories; 55x105 ft.; brick and reinforced concrete; composition roof; metal ceilings and doors; wood floors; steam heat, \$5000; electric and gas lights; M. R. McEachan, Archt., Willington Apts., Atlanta; H. Pitts, Contr., 361 Broadway, Macon. Address Owner. (See Machinery Wanted—Lighting Equipment; Heating Equipment; Plumbing Equipment; Steel.)

Md., Baltimore.—Palmore & Homand, 420-22 E. Lexington St.; erect moving-picture theater, 3301 Greenmount Ave.

Md., Baltimore.—Greater Baltimore Theaters, Inc., Equitable Bldg.; erect motion-picture theater, Philadelphia Rd. and Belmond Ave.; 75x150 ft.; brick and concrete; \$125,000; Henry L. Maas, Contr., 1119 Ensor St.

Md., Baltimore.—Cortes Amusement Co., Monument St. and Patterson Park Ave.; alter and erect 1-story addition to Red Wing Theater; 25x150 ft.; brick and steel; metal ceilings; slag roof; concrete floors; interior tile; steam heat; \$25,000; Jno. Forsythe, Archt., 232 St. Paul St.; E. Eyring & Sons, Contrs., 800 S. Third St.

S. C., Spartanburg.—J. R. Snoddy; improve Bijou Theater; \$10,000; erect 30-ft. extension; 2 stories; brick; install heating system; H. D. Posey Co., Contr., Atlanta, Ga.

### Warehouses.

Fla., West Palm Beach.—Hector Supply Co., Fort Lauderdale; erect \$30,000 office and warehouse building, Poinsettia St.; 115x75 ft.; tile and wood floors; asphalt built-up roof; tongue and groove floors; metal doors; freight elevator 6x12 or 14 ft.; Geo. Young, Archt., Fort Lauderdale; G. W. Mitchell, Contr., West Palm Beach. Address owner. (Lately noted.)

## MACHINERY, PROPOSALS AND SUPPLIES WANTED

**Bag Machinery.**—See Textile Machinery.

**Bridge Construction.**—Wheeler County Commrs., Alamo, Ga.—Bids until Nov. 22; 4 flat slab bridges and 12 culverts; \$60,000; plans, etc., with Garrett & Slack, Engrs., Montgomery, Ala.

**Boiler.**—Gray Bros., Woodford, Va.—100 to 125 H. P. boiler; good condition.

**Boiler.**—Gulf Machinery & Investment Co., New Orleans, La.—Price on 15x20 H. P. boiler; good condition.

**Boiler.**—Mecklenburg Lumber Co., Box 583, Charlotte, N. C.—100 H. P. return tubular boiler, high pressure.

**Boiler.**—Buchannon Light & Water Co., Buckhannon, W. Va.—150 to 200 H. P. boiler.

**Boiler.**—People's Ice & Mfg. Co., T. W. Lawton, Mgr., Sebring, Fla.—Prices on 80 H. P. horizontal return-tubular boiler with fittings, complete.

**Brick Machinery.**—Gray Concrete Co., F. Gray, Secy.-Treas., Thomasville, N. C.—Sand-lime brick press; new or second-hand; good condition.

**Bridge Construction.**—Nueces County Commrs., Corpus Christi, Tex.—Bids opened in December; \$140,000 causeway to connect Corpus Christi with San Patricio County shore of Nueces Bay; length 8156 ft.; 2000 ft. of concrete on concrete piers; 6156 ft. timber; \$300 State and Federal aid; O. N. Powell, County Engr.

**Bronze Tablet.**—Geo. S. Filler, Paw Paw, W. Va.—Data and prices on war hero memorial bronze tablet, accommodate 30 to 40 names.

**Building Materials.**—R. E. Rodgers, Owensboro, Ky.—Building materials, including plaster board, ornamental terra-cotta, plate glass, metal doors, wire glass, glass doors, concrete floors, ventilators and steel and sash trim.

**Candy Machinery.**—Ray Johnson, Box 992, Winston-Salem, N. C.—Data and prices on candy machinery.

**Cars.**—Dunning-Gordon Mining Co., Ernest Dunning, Madisonville, Ky.—50 or more 1½

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

ton 36-in. gage end-dump cars; second-hand preferred.

**Compressor.**—Southern Locomotive & Equipment Co., 1002 Empire Bldg., Atlanta, Ga.—1000-ft. electric-driven air compressor; good condition; with or without motor.

**Concrete Floors.**—Ray Johnson, Box 902, Winston-Salem, N. C.—Concrete floors for candy factory building.

**Containers (Wooden).**—Central Supply Co., 201 E. Markham St., Little Rock, Ark.—3-in. diam. 8-in. high round wooden containers, with wooden tops for bottles, etc.

**Crusher.**—Gray Concrete Co., F. B. Gray, Secy.-Treas., Thomasville, N. C.—30 to 50-ton daily capacity gyratory crusher; new or second-hand; good condition.

**Crusher.**—Roy C. Whayne Supply Co., 608 W. Jefferson St., Louisville, Ky.—No. 4 gyratory crusher on trucks with elevator; state condition.

**Electrical Machinery.**—Acme Electrical Works, James H. Smith, V.-P., 316 Bank St., Norfolk, Va.—Data and prices on three 50 K. V. A. single-phase 60-cycle 11,000 primary and 220-110-volt secondary outdoor transformers; 150 K. V. A. 11,000 primary and 220-volt secondary transformers.

**Elevator.**—Samuel E. Hubbard Hardware Co., Cambridge, Md.—Prices on new and second-hand 1 to 1½-ton capacity elevator, hand-power, 7x14-ft. platform, 14 ft. height from first to second floor.

**Engine.**—G. E. Irish, 512 Gillespie St., Knoxville, Tenn.—Small gas engine.

**Engine.**—Casey Machine Co., Springfield, O.—Prices on 7x8-in. hoisting engine (double), 14 or 16-in. drums, for drag-line outfit, with boiler capacity for continuous use; description and location.

**Engine.**—Southern Silica Mining & Mfg. Co., 1643 Main St., Columbia, S. C.—Second-hand 10x12 Lidgerwood hoisting engine; double drum; double cylinder; boiler attached.

**Engine.**—Interstate Equipment Corp., 23d and 24th Sts., bet. DeBree and Llewellyn Aves., Norfolk, Va.—700 to 750 H. P. Corliss engine; state make guaranteed condition, best dealer's price, location for inspection.

**Engine.**—Atlantic Engineering Co., Commercial Bank Bldg., Savannah, Ga.—Large double drum, double cylinder hoisting engine complete with boiler, consider 9x10, prefer 10x10 or 10x12; delivery South Carolina; wire price, description, etc.

**Engine.**—A. Earle Butler, Mgr., City Planning Mill Co., Box 462, Breckenridge, Tex.—Prices on 8 or 10 H. P. gas or gasoline engine.

**Engine.**—Elkhorn-Marrowbone Coal Co., S. W. Ratcliff, Mgr., Wolfpit, Ky.—Prices on hoisting engine.

**Engines (Gas).**—G. E. Johnson, Norfleet St., Franklin, Va.—Names and addresses mfrs. ½ to 1 H. P. gas engines; air or water-cooled.

**Extract Machinery, etc.**—Central Aerating Gas Co., Ambala Cantt., Punjab, India.—Mills and mchy. to mfr. concentrated extract from vegetable tanning materials.

**Feed Mills.**—Southern Realty Co., Lamar Watson, Mgr., Greenville, Miss.—Mchy. to grind and mix feed; use alfalfa, oats, corn, etc.

**Fiber Board.**—Geo. B. Stratton, Box 712, Southern Pines, N. C.—Prices on fiber board.

**Flooring.**—Edw. A. Erdbruegger, 2909 National Bridge Ave., St. Louis, Mo.—Hardwood floors.

**Foundry Equipment.**—T. A. Parey, 917 Conwell St., Connersville, Ind.—Prices on iron and brass foundry equipment.

**Generator.**—People's Ice & Mfg. Co., T. W. Lawton, Mgr., Sebring, Fla.—Prices on 2 to 5

K. W. 110-volt D. C. electric generating set, direct connected to steam engine.

**Grinding Machinery.**—See Feed Mills.

**Hardware.**—Geo. O. Hollow Co., 222 Kennedy Bldg., Tulsa, Okla.—Prices on building hardware.

**Hardware.**—S. D. Adelson, Plant City, Fla. Prices on hardware for dwellings.

**Hardware (Trunk).**—Geo. B. Stratton, Box 712, Southern Pines, N. C.—Prices on heavy presses, steel corners and fittings for trunks or boxes.

**Heater.**—John G. Duncan Co., 101 E. Jackson St., Knoxville, Tenn.—Dealers' prices on second-hand closed feed-water heater, suitable for 100 to 125 or 150 H. P. boiler; state condition and location.

**Heating Equipment.**—C. H. Douglas, 363 Broadway, Macon, Ga.—Lighting equipment for theater, office and store building; 3 stories; 55x105 ft.

**Lighting Equipment.**—C. H. Douglas, 363 Broadway, Macon, Ga.—Heating equipment for theater, office and store building; 3 stories; 55x105 ft.

**Lime Machinery.**—Columbia Clay Co., Columbia, S. C.—Names and addresses makers mchy. to mfr. hydrated lime.

**Locomotives (Electric).**—Clay Gas Coal Co., J. W. Reeves, Secy.-Treas., Hartland, W. Va. Prices 'on storage-battery motors.

**Locomotives.**—Ralph R. Raney, New Paris, O.—One to three 16 to 20-ton standard-gauge dinkey locomotives; pass Ohio boiler inspection; state condition and point of delivery.

**Lumber.**—Geo. O. Hollow Co., 222 Kennedy Bldg., Tulsa, Okla.—Prices on lumber.

**Machine Tools, etc.**—T. A. Parey, 917 Conwell St., Connersville, Ind.—Prices on machine shop tools and supplies.

**Mantels.**—S. D. Adelson, Plant City, Fla.—Prices on mantels for dwellings.

**Mill (Vinegar) Machinery.**—Salem Selling Co., Salem, Va.—Names and addresses mfrs. vinegar-mill machinery.

**Mining Machinery.**—Clay Gas Coal Co., J. W. Reeves, Secy.-Treas., Hartland, W. Va. Prices on mining mchy.; for daily output 100 tons.

**Mixing Equipment.**—See Feed Mills.

**Motor.**—Thos. W. Halladay, Longview, Tex.—Second-hand 30 H. P. motor.

**Motors, etc.**—Panama Canal, A. L. Flint, General Purchasing Officer, Washington, D. C.—Bids until Dec. 7 to furnish motors; steel rods; dies; chisels; pumps; screen-door springs; iron pipe; riveting forges; turnbuckles; platform scales; gauges for unloading towers; copper tanks; grease cups; fusible tires; rubber tubes; vulcanizing cement; horsehide gloves; duck; boiler covers; asbestos gaskets; packing; steam hose; rubber tubing; celluloid; glass; crayons; sewer pipe; paper napkins, drinking cups, etc. Blank forms and information (Circular 1421) on application to offices of Panama Canal; Asst. Purchasing Agents at New York, New Orleans, San Francisco, Cal.; United States Engr. offices throughout country.

**Oil Base (Abersol).**—Stockham Pipe & Fittings Co., R. E. Risley, Research Engr., Birmingham, Ala.—Quantities of oil base, known as Abersol, to form base for water soluble-cutting compound.

**Oils (Core).**—Stockham Pipe & Fittings Co., R. E. Risley, Research Engr., Birmingham, Ala.—Names and addresses firms who refine core oils.

**Paints, etc.**—Geo. O. Hollow Co., 222 Kennedy Bldg., Tulsa, Okla.—Prices on paints and oil.

**Paving.**—City, L. L. Woollen, Mayor, Cleveland, Tenn.—Bids in spring; sheet as-

phalt, asphaltic concrete, cement concrete or bituminous concrete streets; \$350,000 available; S. D. Newton, Engr.

**Pipe.**—P. O. Box 641, Savannah, Ga.—Prices on 20-in. second-hand shore and pontoon pipe; state condition and location.

**Pipe-threading Machine.**—Virginia Machinery & Well Co., 1319 E. Main St., Richmond, Va.—4½ to 8-in. or 4½ to 6-in. portable pipe-threading machine.

**Piping (Steam) System.**—Bureau of Yards and Docks, Washington, D. C.—Bids until Dec. 1 to furnish: Steam receiver, piping, valves, fittings, accessories and concrete trenches for extension of high-pressure steam mains at Navy-yard, Norfolk, Va.; Spec. No. 4255; plans on file or with commandant of navy-yard.

**Planer.**—John Porter, Smithport, N. C.—New or second-hand planer.

**Plumbing Equipment.**—C. H. Douglas, 363 Broadway, Macon, Ga.—Plumbing equipment for theater, office and store building; 3 stories; 55x105 ft.

**Printing Machinery.**—See Textile Machinery.

**Pumps.**—Mecklenburg Lumber Co., Box 583, Charlotte, N. C.—Quotation on all sizes steam and hydraulic pumps.

**Rails.**—Gulf Machinery & Investment Co., New Orleans, La.—2000 ft. new or second-hand 60 or 70-lb. rails, subject to Hunt's inspection; state condition and price f. o. b.

**Rails.**—H. W. Stewart, 127 Dearborn St., Chicago, Ill.—2 mi. 40-lb. relaying rails.

**Rails, etc.**—Elkhorn-Marrowbone Coal Co., S. W. Ratcliff, Mgr., Wolfpit, Ky.—2 carloads 16, 25 and 70-lb. steel rails with angle bars, bolts and spikes.

**Rails.**—Mecklenburg Lumber Co., Box 583, Charlotte, N. C.—5 tons 25-lb. relay rails, with fish plates or angle bars.

**Retort.**—Mecklenburg Lumber Co., Box 583, Charlotte, N. C.—84-in. diam. by 100-ft. long creosote retort.

**Rice Mills.**—Power Equipment Co., P. E. Fallon, Secy., 211 E. Markham St., Little Rock, Ark.—Names and addresses mfrs. portable rice mills; daily capacity 300 bushels.

**Road Construction.**—State Highway Comsn., Montgomery, Ala.—Invite new bids; grade and drain 18.88 mi. Guntersville and Box road; Federal-aid Project No. 88; W. S. Keller, State Highway Engr., Montgomery, Ala.

**Road Construction.**—State Roads Comsn., 601 Garrett Bldg., Baltimore, Md.—Bids until Dec. 7; 2.42 mi. State Highway from Harmony Grove to Frederick; macadam resurfacing; Frederick County, Contract F-41; plans, etc., specifications, etc., on file.

**Road Construction.**—State Roads Comsn., 601 Garrett Bldg., Baltimore, Md.—Bids until Nov. 30; 3.90 mi. State highway from end of Contract CH-15 to Benedict; gravel surfacing; plans, etc., with Comsn.

**Road Construction.**—Florence County Commrs., Florence, S. C.—Bids until Nov. 29; 5.982 mi. Florence-Sumter road; Federal-aid Project No. 47; 23,068 lbs. steel reinforcement; plans, etc., with A. L. Erwin, County Supvr.; W. S. Lewis, Div. Engr.; both Florence, and State Highway Engr., Columbia, S. C.

**Road Construction.**—State Highway Dept. of Georgia, Atlanta, Ga.—Bids until Nov. 30; 5 mi. Georgetown-Fort Gaines road; sand-clay; 26-ft. width surfacing; plans, etc., with W. C. Caye, Jr., Div. Engr., Third Dist., Americus, Ga., and State Highway Engr., Atlanta, Ga.

**Road Roller.**—City, L. L. Woollen, Mayor, Cleveland, Tenn.—Prices on 10-ton three-

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

wheel road roller of standard make, steam driven.

**Roofing, etc.**—Manly Jail Works, Dalton, Ga.—Prices on 30 squares metal ceiling and beams; 60 ft. 40-in. galvanized iron cornice; cuts, etc.

**Roofing.**—S. D. Adelson, Plant City, Fla.—Prices on roofing for dwellings.

**Sash and Doors.**—Geo. O. Hollow Co., 222 Kennedy Bldg., Tulsa, Okla.—Prices on sash and doors.

**Steel.**—C. H. Douglas, 363 Broadway, Macon, Ga.—Steel for theater, store and office building; 3 stories; 55x105 ft.

**Sawmills.**—G. E. Irish, 512 Gillespie St., Knoxville, Tenn.—Portable sawmill with 24-in. saw; also one-man machine to cut logs in woods.

**Screen (Gravel).**—T. J. Lane Equipment Co., Springfield, O.—48-in.-dia. 16-ft. gravel screen for washing and screening sand and gravel.

**Sewers.**—City, Geo. W. Thorburn, Clerk, Wichita Falls, Tex.—Bids until Nov. 29; construct 177,975 ft. 18 to 84-in. storm sewers in Indiana, Travis and Austin Sts.; vitrified clay pipe; segmental block; precast or monolithic concrete; 55 inlets; 5 manholes; 145 sq. yds. riprap, etc.; plans, etc., from J. Montgomery, City Engr.

**Sewers.**—City, F. H. Palmer, Mayor, Clinton, Okla.—Bids until Dec. 2; construct sewers; 110 lin. ft. 12-in. vitrified sewer pipe; manhole; 18,150 lbs. cast-iron pipe; gate valves, etc.; plans, etc., on file or from Black & Veatch, Engrs., Mutual Bldg., Kansas City, Mo.

**Shovel (Steam).**—Allen Oden Ore Co., Birmingham, Ala.—One-half-yard steam traction shovel; state size, weight, condition, location, price.

**Shovel (Steam).**—T. J. Lane Equipment Co., Springfield, O.—Steam shovel caterpillar traction; 1½-yd. dipper; long boom and dipper stick for coal stripping.

**Shovel (Steam).**—Casey Machine Co., Springfield, O.—Prices on small caterpillar steam shovel, ¾-yd. dipper, Marion 28 or Bucyrus 14; description and location.

**Steel Angles, etc.**—T. V. Pattabirama Chettiat & Sons, Malabar Coast, Big Bazaar Road, Polghat, India.—Mild steel angles, old and condemned, ¼ to ½-in. thickness, 3x4x4-in. width, 1 ft. and above in length, without holes, bolts and nuts preferred; 5/16 to ½-in. railway bearing spring flats, 2 to 4-in. width, various lengths; delivery c. i. f. c. Madras.

**Tank.**—Fayetteville Ice & Mfg. Co., Fayetteville, N. C.—Wrought-iron tank; 4x8 ft.

**Tanks.**—Mecklenburg Lumber Co., Box 583, Charlotte, N. C.—Two 10,000-gal. capacity tanks.

**Tile.**—Ray Johnson, Box 992, Winston-Salem, N. C.—Hollow fireproof tile for candy factory building.

**Tobacco Plant Equipment.**—Patented Cigar Wrapper Co., Willard J. Goodfellow, V.-P. and Mgr., Bentley Springs, Md.—Bids until Dec. 1; tobacco machinery; 48x48-in. drier, compress, juicing machine, cooking tank.

**Textile Machinery.**—Antoine Aurengo, Pelissanne, France.—Names and addresses mfrs. mchy. for: Whipping, hemming and picking bags and awnings; cleaning, filling and turning bags; darning and repairing bags; marking and printing bags.

**Tile.**—Edw. A. Erdbruegger, 2909 National Bridge Ave., St. Louis, Mo.—Interior tile.

**Tramway, etc.**—R. G. Bailey Coal Co., Williamson, W. Va.—500 ft. double aerial tramway, drum, etc.

**Trucks.**—Mecklenburg Lumber Co., Box 583, Charlotte, N. C.—20 cresote trucks.

**Turbine.**—United States Engineer Office, Florence, Ala.—Bids until Dec. 15 to furnish: 1000 H. P. hydraulic turbine with governor; information on application.

**Veneer.**—Geo. B. Stratton, Box 712, Southern Pines, N. C.—Prices on 3-ply veneer.

**Wallboard.**—Geo. O. Hollow Co., 222 Kennedy Bldg., Tulsa, Okla.—Prices on wallboard.

**Water-works.**—Town, W. K. Holt, Mayor, Rebecca, Ga.—Data and prices on water-works.

**Water-works.**—City, F. H. Palmer, Mayor, Clinton, Okla.—Bids until Dec. 2; construct filter-house and coagulating basins addition; lay cast-iron water mains; 238 cu. yds. reinforced concrete; 4750 lbs. standard special II. & S. castings for water; 4000 lbs. cast-iron pipe, etc.; plans, etc., on file or from Black & Veatch, Engrs., Mutual Bldg., Kansas City, Mo.

**Wheels.**—East Carolina Ry., Henry C. Bridger, Prest., Tarboro, N. C.—20 and 30-in. light spoke steel wheels or cast-iron centers, with steel tires having standard M. C. B. tread and flange.

**Wire Protectors (Window).**—Barrett & Hartsfield, Kinston, N. C.—Names and addresses mfrs. wire window protectors for store building.

**Woodworking Machinery.**—Thos. W. Hallday, Longlew, Tex.—Second-hand woodworking mchy., including: Band resaw; self-feed rip table; hoe, rake and fork handle lathe; nailing machine; box-stenciling machine.

**X-Ray Apparatus.**—Austin X-Ray & Chemical Laboratory, Dalton R. Richardson, 404 Scarbrough Bldg., Austin, Tex.—Data and prices on X-ray apparatus.

## INDUSTRIAL NEWS OF INTEREST

Items of news about industrial, railroad or financial interests, building operations, construction work, municipal improvements, or the sale of machinery or the letting of contracts in the South or Southwest, are invited from our readers whether they are advertisers or subscribers or not. We invite information of this character from readers in the North and West about their Southern business operations, as well as from Southern readers. News of value will be published just as readily when from non-advertisers as from advertisers.

### Interesting to Contractors.

To make its large line of paving, trench-digging and concrete-mixing machinery immediately available to contractors, the Austin Machinery Corporation of Chicago reports the establishment of 10 primary district offices and warehouses, and more than 50 subsidiary offices and agencies throughout the United States. The cities selected for the district offices and warehouses were chosen with regard to their strategic positions for trunk-line shipments, and each warehouse carries a full stock of machines, including repair parts. Soon all types of these machines will be available on short notice anywhere in this country and in much of Canada.

### Branch Factory Established.

A branch factory at Detroit, Mich., has been established by the Morse Chain Co. of Ithaca, N. Y., manufacturer of "rocker joint" silent chain used on automobiles for power transmission. It will be devoted exclusively to the manufacture of silent chain sprockets and the Morse adjustment. This branch will be under the general management of F. C. Thompson, with F. M. Hawley as chief engineer and C. B. Mitchell as factory manager. Sales and engineering offices are at the Detroit plant, corner of 8th and Abbott streets. The main plant of the company at Ithaca, where the first buildings were erected in 1907,

## Railroad Construction

### Railways.

N. C., North Wilkesboro.—H. S. Janes Timber Co., Inc., 66 Broadway, New York, confirms report of proposition to rebuild the Watauga & Yadkin River Ry., 26½ mi. long from North Wilkesboro to Grandin and Darby, N. C., and state they are working on plans. H. C. Landon is Gen. Mgr. of the road.

Okla., Henryetta.—It is announced that survey will be made immediately for a proposed railroad running southward to oil and coal fields. J. A. Frates and R. E. Brooke, interested in the construction of the Oklahoma Southeastern R. R., now in progress, are also said to be concerned in this new plan.

Okla., McAlester.—Pittsburgh County Railways Co. contemplates building an extension to Fort Smith, Ark.

Tex., El Paso.—El Paso Electric Railway Co. proposes to complete double track at cost of \$60,000, besides other work.

Tex., Newcastle.—Wichita Falls & Southern Ry. Co. has applied to the Interstate Commerce Commission for authority to build the proposed extension of the Wichita Falls & Southern A. R. from Newcastle to Breckenridge, Tex., 44 mi. Frank Kell, Wichita Falls, Tex., is Gen. Mgr.; J. A. Kemp, same address, is Prest.

Va., Roanoke.—Roanoke & Botetourt R. R. Co. is chartered to build a 12-mi. line from Cloverdale, on the Shenandoah Valley Division of the Norfolk & Western Ry., to the Catawba Iron Mines. Abram P. Staples of Roanoke is attorney. Philadelphia capital is interested.

### Street Railways.

La., Monroe.—Monroe Municipal Street Railway Co., it is reported, will extend its line into the northern part of the city.

is continuously being enlarged, and there are now three big construction gangs at work on two large new concrete buildings, which, when completed, will make a considerable addition to the seven acres of floor space previously under roof. There is also being built another concrete stack 155 feet high to provide for additional power-plant equipment. The Detroit plant was established to partially relieve the Ithaca plant in meeting the steadily increasing demand for Morse products, including heavy factory, mill and shop drives. The chain specialists of these plants are always studying for improvements and seeking the most efficient machines, tools and other equipment.

### Now Under a New Name.

Corporation Service Co. is the new name of the Corporation Company of Delaware. Offices are in the Equitable Bldg., Wilmington, Del. The Corporation Company has been taken over by the new organization, of which Christopher L. Ward is president; Josiah Marvel, vice-president; George G. Stiegler, secretary, and Wm. J. Maloney, treasurer.

### Calendar for 1921.

The first calendar for 1921 received by the Manufacturers Record comes from the Draper Corporation, Hopedale, Mass. It is gotten up very similar to other calendars issued by this



company, and the large wall card bearing the monthly sheets carries a picture showing one of the Northrop looms manufactured at the Draper plant. Interspersed with the monthly calendar sheets are daily leaves, with blank spaces for memoranda. Altogether it is a very practical and convenient publication that will be generally appreciated.

#### Location Changed.

The Chicago Pneumatic Tool Co. announces the removal of its rock-drill plant from 864 E. 72d St., Cleveland, O., to the company's Boyer pneumatic hammer plant at 1301 Second Boulevard, Detroit, Mich. The location of the company's Little Giant air-drill plant at 1241 E. 49th St., Cleveland, remains unchanged.

#### Change of Name.

It is announced that the partnership of Walter F. Ballinger and Emile G. Perrot, as Ballinger & Perrot, architects, engineers and constructors, 329 South Broad Street, Philadelphia, Pa., has been dissolved, but that the business will be continued by Mr. Ballinger under the name "The Ballinger Company" at the same location. The New York offices are at 1328 Broadway.

#### District Manager Appointed.

L. R. Fedler has been appointed district manager for the Keller Pneumatic Tool Co. in the Milwaukee district, with offices at No. 915 Majestic Bldg., Milwaukee, Wis. For the past 12 years Mr. Fedler has been associated with the sales organization of the Chicago Pneumatic Tool Co. in the Milwaukee territory.

#### Change of Name.

At a meeting of stockholders of Hubbard & Harris, Inc., consulting engineers, Bridgeport, Conn., it was voted to change the name to Hubbard, Harris & Rowell, Inc. Harry E. Harris is president and treasurer; Ralph K. Rowell, vice-president; H. B. Harris, secretary. The business, it is stated, will be conducted as a personal-service corporation, and Mr. Rowell, until recently equipment engineer with the International Motor Corporation, will handle many of their increased activities in designing special equipment and grinding machines.

#### Address Changed—Improvements.

The Falcon Steel Co., Niles, Ohio, announces that C. H. Dayton, who is handling their sales account in New England, has changed his address from 120 Franklin St. to Room 414 at 100 Franklin St., Boston, Mass. It is also noted that their galvanizing and pickling equipment have been completely installed, and they are now finishers of black, blue annealed, galvanized, single pickled and uniform blue stove-pipe sheets.

#### Appointments Announced.

On November 22 S. C. Wilson took up his duties as sales engineer in the Pittsburgh office of the Whiting Corporation, 1224 Fulton Bldg., Pittsburgh, Pa., succeeding C. H. Martin. Mr. Wilson, who is a graduate of Cornell University, has spent a year and a half in the main office and works of the corporation at Harvey, Ill. J. D. James, also of this corporation, has taken up duties as assistant to the Whiting organization's Buffalo representative, Geo. F. Crivel, 430 Ellicott Square, Buffalo, N. Y. Mr. James has been in the employ of the corporation for 11 years in various capacities.

In writing to parties mentioned in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

## Trade Literature.

### A Superior and Valuable Catalog.

"Standardized Leather Belting for Power Transmission," Bulletin No. 101, is issued by the Graton & Knight Mfg. Co., Worcester, Mass., and will constitute a valuable addition to the reference libraries of industrial plants, containing, as it does, complete tables covering many pages, showing the industrial application of the G. & K. belts in various lines of manufacture. These cover cement mills, cottonseed oil mills, cotton gins, feed mills and grain elevators, machine shops, pulp and paper mills, steel, cotton, woolen and worsted mills, finishing, bleachery and dyehouse plants, woodworking plants, etc. Instructions as to how to order belting are given, together with sundry tables as to power, speeds, etc. The products of the manufacturers are fully described, and the entire book, letter press as well as pictures, is handsomely prepared.

### Electric Furnaces.

The latest bulletin of the Booth Electric Furnace Co., 326 W. Madison St., Chicago, is descriptive of their rotating electric furnaces. While this type of equipment has largely been used for brass melting, a number of furnaces are now in operation melting iron and steel and other metals requiring higher temperature. The accompanying photographs and blueprints shown in great detail the principles of construction embodied in this simple drum-type electric arc furnace, and, it is further stated, the engineers who have perfected this equipment have had very wide practical experience in designing and operating electric furnaces. Even distribution of heat, thorough mixing and refinement of the charge, lowest practical consumption of electricity and minimum of cost for repairs have been their aim.

### Important to Concrete Builders.

A book written by H. S. Rogers, B.Sc., C.E., and issued by the engineering department of the Truscon Steel Co., Detroit, Mich., is devoted to a consideration of shearing stresses in beams in reinforced concrete building designs. It gives a complete analytical comparison of loose stirrup designs and beams reinforced with rigidly-connected shear members. Some of the matters discussed are requirements of beam design, cost of steel and handling, stress lines, designing of shear members and anchorage of them. Two appendices consider the anchorage of web reinforcement and bond stress. The author, who has devoted considerable time to the study and practical design of reinforced concrete structures, is now connected with a university as professor of hydraulics and structural mechanics. A copy of this interesting book will be sent to anyone on request.

### Two New Folders.

Two folders have just been issued by the Blaw-Knox Company, Pittsburgh, one of them relating to the Bulldog buckets and the other to a discussion of lever arms, rated capacities and S-bends. Each is appropriately illustrated, the latter being in several colors.

### Superheated Steam.

The Babcock & Wilcox Co., New York, has issued a handsomely prepared book of eighty pages, called "Steam Superheaters," which includes a general consideration of superheated steam and its applications. The history of its use is related in the course of

several pages, followed by a study of the properties of steam that is superheated. Diagrams and tables are employed to illustrate and enlighten the text. Next is a chapter on the advantages of superheated steam, and results of tests are presented. The rest of the book is devoted to descriptions of the Babcock & Wilcox superheaters and a study of their construction. Numerous fine illustrations accompany the reading matter; they show installations as well as the exteriors of buildings in which installations have been made. Other pictures display cross-sections of superheater construction. Altogether this publication is a superior production.

### Tiering Lift Trucks.

Two recent publications—one a pamphlet, the other a circular—issued by the Lakewood Engineering Co., Cleveland, O., relate to the advantages of the tiering truck manufactured by this company. The circular shows the device and gives a short description thereof; the pamphlet tells about how it is profitably employed, one instance cited being the use of three men instead of six, as formerly, to pile cottonseed meal, but the reduction in cost being even more pronounced because of increased speed of work. Other instances of profitable application of the tier lift truck are also given. It is particularly noted that the lifting range of the truck has been increased to 96 inches, and a new model, including double lifting speed, has been made for handling light, bulky packages.

### Electric Generators and Exciters.

Bulletin No. 40017A, superseding No. 40017, issued by the General Electric Co., describes belted, direct-current, continuous rated, A. I. E. E. rating and temperature rise generators and exciters, Type ML, standardized from 1 to 35 K. W., both compound and shunt wound, for 125 and 250 volts, two-wire, and in sizes above and including 7 K. W., for 250 volts, three-wire. When used as exciters they are flat-compounded at 125 volts; otherwise, they are compounded from 115 volts no load to 125 volts full load, unless a shunt-wound machine is desired. Up to and including 9 K. W. they are also standard, shunt wound for 35 volts, for storage-battery service.

### Grinding.

A little book, neatly and substantially bound, and entitled "Steadyrests—Form Grinding—Grinding of Plane Surfaces," has been issued by the Norton Company, Worcester, Mass., which has copyrighted it. The author is Howard W. Dunbar, who tells about the development of Steadyrests and presents a study of correct work shoes, considering also the effect of Steadyrests on production and giving suggestions for their use. In the next chapter are considered the evolution and the principles of the wide face wheel as related to form grinding, the application of the same wheel to grinding of irregular shapes, this being followed by a description of attachments and general suggestions. The third division of the book deals with the types of machines used for grinding plane surfaces, selection of wheels, the accuracy possible, methods of handling work and the kinds of materials ground. This publication will be welcomed by workers in these lines.

### Roof Flashings.

A roof-flashing handbook, presenting details and specifications, has been issued by the Barrett Company of New York and other cities. Years ago, it is observed, this company brought out its specifications for flat

roofs of permanent buildings, simplifying and standardizing roofing practice, but now it has gone a step further and applied engineering skill to solve another important roofing problem, namely, that of providing reliable, standard flashings. There are nearly fifty pages in the book, which contains appropriate illustrations of construction with the reading matter, and also blueprints displaying details.

#### Electric Hoists.

The Sprague Electric Works of the General Electric Co., 627 West 34th street, New York, in Bulletin No. 48961 describe and illustrate their Type W electric hoists, floor controlled. These hoists are made in capacities of from one to six tons, to be operated by both direct and alternating current. The descriptions are full and complete, with appropriate pictures interspersed. There are also larger illustrations, showing some of these hoists at work.

#### Relating to Railroad Terminals.

A special issue of "The D. P. R. News" has been published by Dwight P. Robinson & Co., Incorporated, 125 East 46th St., New York, to bring to the attention of railroad managements the importance of improving terminal facilities, roundhouses, shops, etc. It is prepared in a first-class manner, with superior illustrations, and the entire contents are illuminating and impressive.

#### Valuations and Reports.

Ford, Bacon & Davis, engineers, 115 Broadway, New York, have issued a pamphlet with the title "Strength in Union." It deals particularly with the valuation and report department of the organization and briefly presents its purpose and scope. There are altogether seven departments and an operating staff of over 500 employees.

#### Electric Signs.

Bulletin No. 398 of the Indestructible Sign Co., Columbus, O., illustrates and describes its new cut-out, drilled-in letter electric script-letter sign. The sign picture is double-faced with 24 15-watt lamps, and it is stated that the source of light is not visible, but the name appears as if at white heat. In daytime the lamps are practically invisible.

#### Power Plants—Oil Engines.

Four fine booklets have been issued by the De La Vergne Machine Co., 1220 East 138th St., New York. They relate, respectively, to "Municipal Power Plants," the "De La Vergne Diesel Oil Engine," "De La Vergne Oil Engines, Type SI," and "Economic Power Plants." All of them are illustrated in a superior manner, the pictures being accompanied by complete and interesting descriptions. The company has been building oil engines since 1896, and the first booklet displays installations made for several municipalities. The second booklet mentioned is really Bulletin 178, and it is complete, concerning the Diesel type engine made by this company. The SI type referred to in the third publication is the solid injection type. Other engines of economical efficiency are described in the fourth booklet.

#### Motor Trucks in Oil Industry.

The White Company, Cleveland, O., has issued a large book of over 50 pages telling about the manifold uses of White trucks in connection with the oil industry, the letterpress being accompanied by many fine illustrations, all of them upon heavy, finely-cal-

dered paper. It is stated that there are more White trucks occupied in the oil industry than in any other one industry; also that in 1919 an average of five new trucks of this make a day went to work every working day in this business; furthermore, that the first of these trucks ever sold to an oil company (in April, 1910) is still giving dependable service. This is a remarkably superior publication, and all of the pictures it contains are of high character, clear and distinct, constituting in themselves a presentation of facts which are exceedingly impressive. The vehicles are shown working under a variety of conditions, some of which are unusually severe.

#### Lathe and Planer Tool.

"Standard Radius Lathe and Planer Tool" is the name of a small but finely-illustrated folder issued by the R. G. Smith Tool & Manufacturing Co., Newark, N. J. Numerous pictures show the features and uses of this tool, which is described as being "a time and money saver, always ready, always accurate."

#### OBITUARY.

##### Joseph H. Baird.

Joseph H. Baird, president of the Baird Machine Co. of Bridgeport, Conn., until 1913, when he voluntarily retired to make way for a younger man, died November 14, at Cheshire, Conn., at the age of 92 years and 11 months. Mr. Baird was born at Oakville, near Waterbury, in that State, on December 9, 1827, and when only 10 years of age went to work in a hardware factory there. When 19 years old he went to Huntington, Conn., and opened a shop to make tools, presses and special machinery. He succeeded in making good machines, but not in making money, and four years later returned to Oakville and the Scoville & Buckingham Company, with which he had begun work. In 1854 he established himself on his own account at Oakville, but soon, at the invitation of J. C. Welton, went with the Oakville Company, manufacturing pins and other notion goods, designing tools and machines for them. Mr. Baird was, first of all, an inventor, and the Baird Machine Co. resulted after several other business and manufacturing connections following seven years with the Oakville Company. It is said he was the first man in this country to manufacture pins, inventing machines for making them and for sticking them in the papers in which they are sold; he also invented a safety-pin machine, and one for fastening the hoops in hoop skirts, besides other devices widely used in various manufacturing processes. His home was at Oakville.

## Financial News

### New Financial Corporations.

Ala., Boaz.—National Bank of Boaz organized; capital \$25,000; Hogan Jackson, Pres.; John H. Fletcher, V.-P.; D. K. Searcy, Cashr.

Ala., Mobile.—People's Bank of Mobile organized; consolidation of People's Bank of Mobile and Union Commercial Bank; capital \$200,000; surplus and undivided profits \$327,490.42; A. L. Staples, Pres.; J. C. Bush, Jr., V.-P.; H. A. Pharr, Cashr.

Fla., Coconut Grove.—Bank of Coconut Grove organized; capital \$15,000; A. W. Sanders, Pres.; Wm. V. Little, V.-P.; Geo. R. Reynolds, Cashr.

Fla., Jacksonville.—Southern Cattle Loan Co. inceptd.; capital \$500,000; J. C. King,

Pres., Arcadia, Fla.; H. M. Bennett, V.-P. and Gen. Mgr.; Arthur T. Williams, Secy.; L. S. Gaulden, Treas.; each Jacksonville.

Fla., Jacksonville.—Southern Federal Farm Banking Corp. organized; capital \$6,000,000; Arthur F. Perry, Jacksonville; J. S. Reese, Chrmn., Pensacola, Fla.; J. A. Griffin, Tampa, Fla.

Ga., Atlanta.—Lakewood Bank chartered; capital \$25,000; A. G. Rhodes, Harrold Parrish, Isaac Schoen.

Ga., Macon.—Columbian Building Assn. inceptd.; capital \$5000; A. A. Bendetto, W. H. Mitchell, A. J. Long.

La., New Orleans.—Federal International Banking Co. organized; capital \$6,000,000.

Md., Baltimore.—Commercial Finance Co. inceptd., 1417 S. Carey St.; capital \$200,000; Geo. Hudlin, Thomas L. Hayleck, William F. Beasley, Jr.

Mo., Kansas City.—Roosevelt Life Insurance Co. organized; capital and surplus \$125,000; Henry H. Marten, O. J. Martin.

N. C., Greensboro.—Farmers & Mechanics' Bank & Trust Co. organized; capital \$200,000; J. P. Sanders, Pres.; S. A. Caviness, 1st V.-P.; C. I. Clark, 2d V.-P. (Supersedes recent item.)

N. C., West Durham.—Bank of West Durham organized; capital \$25,000; J. O. Cobb, Pres.; T. M. Davis, V.-P.; Geo. G. Johnson, Cash.

N. C., Wilson.—Commercial Bank of Wilson inceptd.; capital \$25,000; S. H. Vick.

Tex., Fort Worth.—Park Investment Co. inceptd.; capital \$60,000; H. L. Payne, R. A. Hardin, R. H. Wilson.

Tex., San Antonio.—Karotkin Loan Co. inceptd.; capital \$5000; Harry Karotkin, I. P. Karotkin, Sam Karotkin.

Va., Bristol.—Union Trust Bank organized; capital \$500,000; S. B. Pace, Roanoke, Va.; F. W. Donaldson, Morristown, Tenn.; W. C. Tate, Banners Elk, N. C.

Va., Roanoke.—Willis & Walker organized; R. Holman Willis, Sam P. Walker, George R. Allen.

W. Va., Welch.—Automobile Finance Corp. chartered; capital \$50,000; R. H. Miller, J. Logan Hill, John W. Blakeley, J. W. Price.

### New Securities.

Ala., Fairfield.—School.—City, A. Clinton Becker, Mayor; sold \$42,500 of 6 per cent \$1000 and \$500 denomination bonds, dated Nov. 1, to Fairfield Land Co., Fairfield, Ala.; Realty Investment Co., Ensley, Ala., and Steiner Bros., Birmingham, Ala., at 91.17; sold \$12,000 of 6 per cent \$1000 denomination bonds, dated Nov. 1, to Steiner Bros., Birmingham, Ala., at 87½.

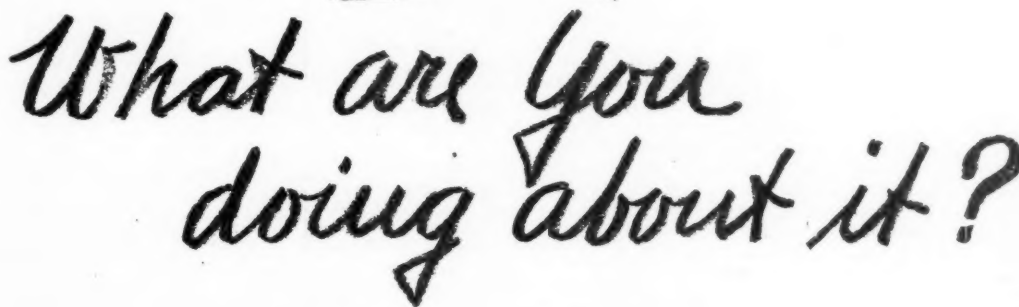
Ala., Montgomery.—Bridge.—Montgomery County Board of Revenue, J. W. Heustates, Clk.; bids until Dec. 13; \$50,000 of 5 per cent \$1000 denomination 30-yr. bonds, dated Jan. 1.

Ark., Charleston.—School.—Charleston Special School Dist. No. 9 sold \$9000 of 6 per cent bonds to Bank of Charleston and American State Bank at par.

Ark., Perryville.—Drainage.—Cypress Drainage Dist. Perry and Conway Counties; sold \$30,000 of 6 per cent semi-annual \$500 denomination bonds, dated Mar. 1, to Friedman, O'Neen & Luhnne, St. Louis, Mo.

Fla., Brooksville.—School.—Hernando County Sub-School Dist., L. D. Hathaway, Supt.; bids until Dec. 5; \$20,000 of 6 per cent \$1000 denomination 20-yr. bonds.

(Continued on Page 130.)



Executive Committee, Wm. A. Macan, *Chairman*  
George D. Crabbs, The Philip Carey Co., Cincinnati, Ohio J. R. Swift, The Franklin Mfg. Co., Franklin, Penna.  
Alvin M. Ehret, Ehret Magnesia Mfg. Co., Valley Forge, Penna. R. V. Mattison, Jr., Keasbey & Mattison Co., Ambler, Pa.



Fla., Jacksonville—Street.—City; sold \$217,000 \$1900 denomination bonds at par to Barnett National Bank.

Fla., Miami — Road and Bridge. — Dade County Commrs., W. E. Norton in charge; sold \$350,000 of 6½ per cent \$1000 denomination 34-year serial bonds, dated Oct. 1, to R. M. Grant & Co., New York, at \$368,875. (Lately noted inviting bids.)

Fla., Pensacola.—Dock, Belt Railroad.—City, F. D. Sanders, Mayor; bids until Jan. 10; \$400,000 of 4½ per cent bonds. (Supersedes recent item.)

Fla., South Jacksonville—Municipal Improvements.—City, R. M. Rogero, Clk.; bids until Dec. 21; \$190,000 of 6 per cent semi-annual \$1000 denomination bonds, dated Nov. 1. (Supersedes recent item.)

Fla., Tampa—School.—Hillsborough County School Dist. No. 28; sold \$3,000 of 6 per cent \$1000 denomination bonds, dated July 1 to Citizens' American Bank & Trust Co.

Fla., Tampa — School. — Oak Park School Dist. No. 18, Hillsborough County; sold \$5000 of 6 per cent \$500 denomination bonds, dated July 1, to Citizens' American Bank & Trust Co.

Fla., Tarpon Springs.—Street, Dock, Park and Municipal Building.—City; voted \$226,000 bonds. Address the Mayor. (Lately noted to vote.)

Fla., Vero—Street.—City; vote Dec. 14 on \$40,000 bonds. Address The Mayor.

Fla., West Palm Beach—School.—Palm Beach County Board of Instruction, W. J. Dyer, Chrmn.; sold \$125,000 of 6 per cent semi-annual bonds of Special Tax School Dist. No. 1; \$500 denomination, dated Feb. 1, and \$40,000 of 6 per cent semi-annual bonds of Special Tax School Dist. No. 4. (Lately noted inviting bids.)

Ga., Dublin—Bridge.—Laurens County Commissioners; bids on \$300,000 bonds.

Ga., Kirkwood—School.—City; vote Dec. 1 on \$50,000 of 6 per cent semi-annual \$1000 denomination bonds, dated Jan. 1. Address The Mayor.

Ga., Lagrange—Street, Sewer, Park, Water, Electric, Hospital, etc.—City, S. H. Dunson, Mayor; vote Dec. 16 on \$670,000 5 per cent semi-annual bonds as follows: \$200,000 street, \$100,000 sewer, \$75,000 water, \$15,000 park, \$20,000 electric, \$200,000 school, \$50,000 city hall, \$10,000 hospital.

Ga., Sparta—School.—City, H. S. Chapman, Treas.; vote Nov. 30 on \$50,000 of semi-annual \$500 denomination bonds; \$1500 payable annually; \$500 to be paid 5, 7, 10, 12, 15, 17, 20, 23, 25 and 30 years; Burwell & Fleming, Attys. (Supersedes recent item.)

Ga., Talbotton—Road.—Talbot County Commissioners, H. P. Hewitt, Clk.; sold \$50,000 of 5 per cent semi-annual \$1000 denomination bonds to Robinson-Humphrey Co., Atlanta, Ga., at \$45,000. (Previously noted.)

La., Alexandria — Road. — Rapides Parish Police Jury, J. F. Ball, Prest.; vote Dec. 13 on 5-mill tax in Road Dist. No. 20.

La., Monroe.—Ouachita Parish Police Jury, W. A. O'Kelly, Clerk; bids until Jan. 12; \$1,112,000 District No. 1 bonds; 5 per cent semi-annual; \$1000 denomination, dated Feb. 1. (Supersedes recent item.)

La., Springville—Road.—Livingston Parish Police Jury; issued \$270,000 bonds of District No. 3.

Md., Elkton.—Cecil County Commrs., Philip M. Grove, Clk.; bids until Nov. 23; \$50,000 of 5 per cent semi-annual 24 2-3-yr. improvement bonds.

Miss., Jackson — Road. — Hinds County Supvrs., W. S. Wells, Clk.; bids until Dec. 6; \$200,000 of 6 per cent semi-annual bonds, dated Jan. 1. (Lately noted.)

Miss., McComb—Electric.—City; vote Dec. 6 on \$200,000 bonds. Address The Mayor.

Miss., Meridian—School.—Lauderdale County Supvrs. Dist. No. 2, sold \$40,000 of 6 per cent 1-25-yr. serial bonds, dated Oct. 1. Address Board of Education. (Previously noted receiving bids.)

Mo., Jefferson.—State, Russell B. Gardner, Governor; voted amendment to constitution providing for \$60,000,000 bonds. (Supersedes recent item.)

N. C., Burlington—Water and Street.—City, M. W. McPherson, Clk.; bids until Nov. 15; \$25,000 of 6 per cent \$500 denomination water bonds; due yearly on Sept. 1 as follows: \$500 1921 to 1930, inclusive; \$22,000 of 6 per cent semi-annual \$1000 denomination street bonds, dated Sept. 1.

N. C., Carthage—Highway.—Moore County Commrs., H. P. McPherson, Chrmn.; bids until Dec. 7; \$65,000 of 6 per cent semi-annual bonds, dated Jan. 1.

N. C., Durham—Sewer, Land, Street and School.—City, J. H. Allen, Treas.; sold \$575,000 of 5½ per cent and semi-annual 23-year bonds to Esterbrook Co., New York. (Lately noted inviting bids.)

N. C., Greensboro—School.—Guilford County Commrs.; issued \$24,000 of 5 per cent serial bonds.

N. C., Hickory.—City, R. G. Henry; Mgr.; issued \$30,000 sewer bonds.

N. C., Kinston—Electric.—City; sold \$300,000 of 6 per cent 1-yr. bonds, dated Nov. 15, to A. B. Leach & Co., New York. (Lately noted.)

N. C., Lumberton—Road.—Robeson County Commrs.; vote Dec. 30 on \$25,000 bonds of Saddletree township.

N. C., Lillington.—Coats School Dist., L. L. Levinson, District-Attorney, Coats, N. C.; sold \$30,000 of 6 per cent semi-annual \$1000 denomination bonds, dated Nov. 1, to Weil, Roth & Co., Cincinnati, O., at \$28,700 and accrued interest.

N. C., Marion—Road.—McDowell County Highway Comsn., H. F. Little, Chrmn.; bids until Dec. 6; \$150,000 of 6 per cent semi-annual bonds.

N. C., Morehead City — School. — Graded School Trustees of Morehead City Graded School Dist., C. S. Wallace, Chrmn.; bids until Dec. 15; \$65,000 of 6 per cent semi-annual \$1000 denomination 30-yr. bonds.

N. C., Mooresville—School.—Board of Trustees, J. P. Mills, Chrmn.; bids until Nov. 29; \$50,000 of 6 per cent semi-annual 19-yr. bonds. (Lately noted voting.)

N. C., Pinetops—Electric.—City; vote Nov. 23 on \$25,000 bonds. Address The Mayor.

Okla., Vinita—Hospital.—City; vote on \$30,000 bonds. Address The Mayor.

N. C., Swanquarter — Drainage. — Hyde County Drainage Commrs. Dist. No. 2, J. N. Edwards, Secy.; bids until Dec. 8; \$393,000 of 6 per cent semi-annual bonds, dated Jan. 15.

N. C., Wentworth—Road and Bridge.—Rockingham County Commrs., Hunter K. Penn, Clk.; bids until Nov. 24; \$200,000 of 6 per cent semi-annual \$1000 denomination bonds, dated Nov. 1.

N. C., Wilson—Street, Sewer and Water.—Town, Theo. A. Hinnant, Clk.; sold \$466,000 of 6 per cent semi-annual \$1000 denomination street bonds, dated Nov. 1, and \$46,000 sewer and water bonds to J. C. Mayer, Cincinnati, at \$543,676. (Lately noted inviting bids.)

S. C., Columbia—Street.—City; voted \$300,000 bonds. (Lately noted to vote.)

S. C., Rock Hill.—Street.—City, S. Geo. Moore, Clk.; bids until Nov. 30; changed date

(Continued on Page 134.)

## UNITED STATES SHIPPING BOARD

### Offers for Sale

# STEEL AND WOOD SHIPS AND WOOD HULLS

Bids will be received on a private competitive basis in accordance with the Merchant Marine Act at the office of the United States Shipping Board, 1319 F Street N. W., Washington, D. C.

The ships offered for sale include steel vessels and wooden steamers.

The steel steamers are both oil and coal burners. The Board has established a minimum price on these vessels.

### Terms on Steel Steamers

Ten per cent. of the purchase price in cash upon delivery of the vessel; 5 per cent. in 6 months thereafter; 5 per cent. in 12 months thereafter; 5 per cent. in 18 months thereafter; 5 per cent. in 24 months thereafter; balance of 70 per cent. in equal semi-annual installments over a period of 10 years; deferred payments to carry interest at the rate of 5 per cent. per annum.

The 285 wooden steamers for sale are of 10 different types, as follows: Nine Daugherty type, 17 Ballin type, 10 Peninsula type, 6 Pacific-American Fisheries type, 1 Allen type, 1 Lake and Ocean Navigation Co. type, 13 McClelland type, 186 Ferris type, 31 Hough type, 11 Grays Harbor type, also have a number of wooden hulls of various types.

### Terms on Wooden Steamers

Ten per cent. cash on delivery. Balance in equal semi-annual installments over a period of three years.

Bids may be submitted for one or more vessels or for any combination of above vessels, and must be accompanied by certified check made payable to the U. S. Shipping Board for 2½ per cent. of amount of the bid.

Bids should be submitted on the basis of purchase "as is and where is."

Further information may be obtained by request sent to the Ship Sales Division, 1319 F Street N. W., Washington, D. C.

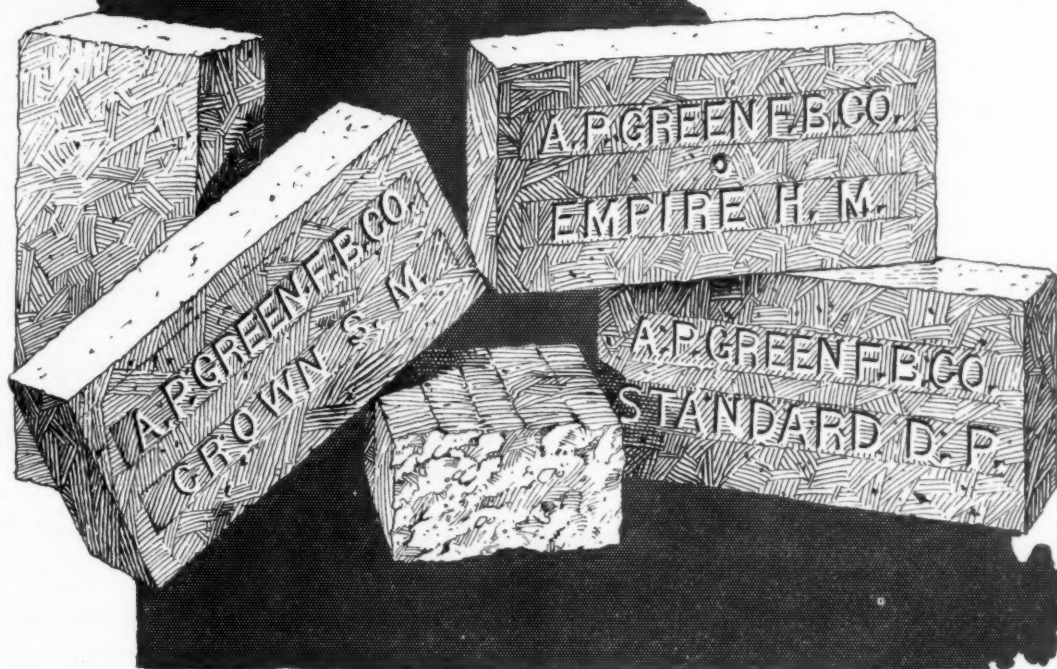
The Board reserves the right to reject any and all bids.

Bids should be addressed to the UNITED STATES SHIPPING BOARD, WASHINGTON, D. C., and indorsed "BID FOR STEAMSHIP (name of ship)."

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*"They Last Longer"*

EMPIRE  
CROWN  
STANDARD



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TO many folk "a fire brick is a fire brick."

But under actual working conditions there is a lot of difference. Good fire clay, of course, is most essential. Then comes the different ways of making that fire brick. Your heats may be severe in combination with abrasion. Then you need a high-grade hand-made brick. Maybe your temperatures are extreme, with sudden

changes. Then an open-texture, porous, dry press brick is best. A stiff mud brick is best where there are high heats and great abrasion. Sometimes conditions are such that a combination lining is best. Your next inquiry—send it to us. A representative will call and study your conditions. He will recommend the right lining. It won't hurt to talk it over.

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to use; there are no  
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Quality Products in-  
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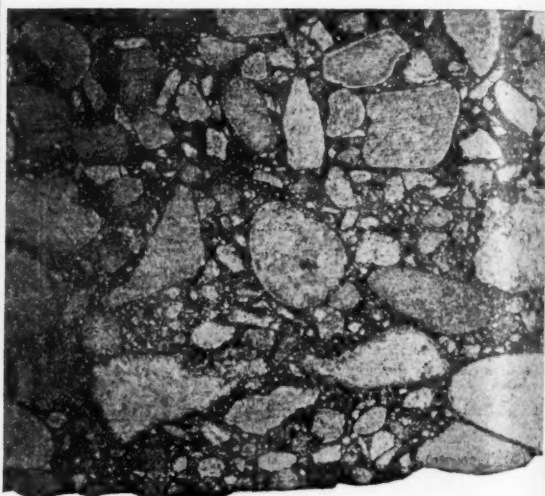
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MENT LAID ON CAMP LEWIS ROADS—1½-IN. WEARING  
SURFACE AND 2½-IN. FOUNDATION.

This type of foundation and road surface  
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Chicago, Ill.	Minneapolis, Minn.	Los Angeles, Cal.





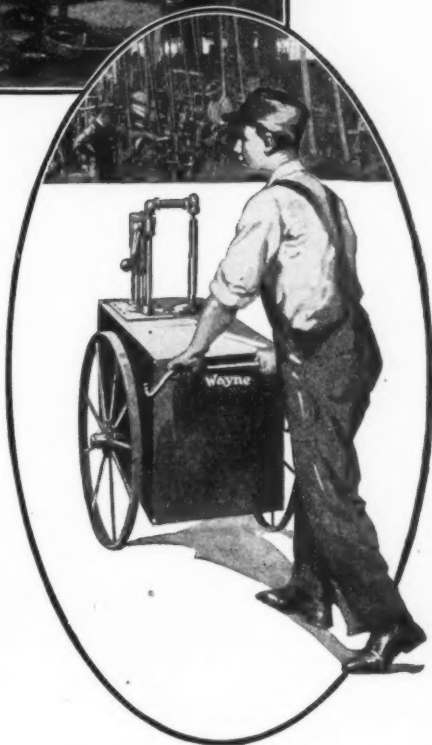
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**No. 227—Wayne Portable Lubricating Oil Outfit.** Holds sixty-five gallons. Pump measures quarts, pints and half pints. Gear-driven meters record departmental oil consumption. Filled from central oil storage. Delivers the oil where you need it.

from Oct. 20; \$100,000 of 6 per cent semi-annual \$1000 denomination bonds, dated Jan. 1.

Tex., Austin—Bridge.—City; vote Dec. 12 on \$25,000 bonds. Address The Mayor.

Tenn., Cleveland.—City, L. L. Woollen, Mayor; issued \$200,000 bonds; bids in December on \$50,000 to \$75,000 of 6 per cent \$500 denomination bonds, dated Jan. 1.

Tenn., Kingsport—Improvement.—City, L. H. Kidd, Mgr.; sold \$63,100 of 6 per cent semi-annual bonds to Bank of Bristol, Va.—Tenn., at par. (Lately noted inviting bids.)

Tenn., Memphis—Drainage.—Big Creek Drainage Dist. of Shelby County; issued \$250,000 of 6 per cent \$1000 denomination bonds, dated Dec. 1. (Supersedes recent item.)

Tex., Houston.—Harris County Commrs.; sold \$20,000 bonds of District No. 8 to Howard Kenyon, Contr.

Tex., Plainview—Sewer.—City, C. F. Vin-

cent, Mayor; vote Dec. 1 on \$100,000 of 6 per cent \$1000 denomination 40-yr. bonds. (Supersedes recent item.)

Tex., Canyon—Street.—City; voted \$30,000 bonds. Address The Mayor.

Tex., Childress—Street.—City; registered \$30,000 bonds. Address The Mayor.

Tex., Dallas—School.—State, W. L. Moore, Atty.; issued \$3700 of 5 per cent \$100 denomination 10-40-yr. bonds, dated Sept. 10, at par. (Supersedes recent item.)

Tex., Fort Worth.—City Comsn.; bids opened on \$1,890,000 bonds.

Tex., Hillsboro—Road.—Hill County Road Dist. No. 12; sold \$105,000 of 5½ per cent semi-annual \$1000 denomination bonds, dated April 10, to Harris Trust & Savings Bank of Chicago.

Tex., Hillsboro—Road.—Hill County Road Dists. 6 and 10; registered \$170,000 of 6 per

cent serial bonds of Dist. No. 6, and \$97,000 of 5 per cent bonds of Dist. No. 10.

Tex., Houston—Street, Bridge, Sewer and School.—City; voted \$375,000 bonds as follows: \$200,000 street, \$425,000 bridge, \$100,000 sewer and \$150,000 school; defeated \$1,250,000 channel. Address The Mayor. (Lately noted to vote.)

Tex., Marshall—Road.—Harrison County Commrs., W. H. Strength, Judge; bids until Dec. 13; \$828,000 of 5 per cent semi-annual bonds.

Tex., Vernon—Road.—Wilbarger County Commrs.; voted \$50,000 bonds.

Tex., Waco—School.—McLennan County Commrs.; vote Dec. 4 on \$3000 bonds in School Dist. 60-A.

Va., Petersburg.—City; sold \$500,000 of 6 per cent 1-year notes to Frederick E. Nolting & Co., 907 E. Main St., Richmond, Va. (Lately noted.)

To The Readers of  
The Manufacturers Record

#### ADDITIONAL TAX BURDENS - ?

November 4th, 1920.

Have you overpaid your tax? Have you paid a larger percentage than other corporations in similar business? Have you received an assessment for additional tax for the years 1917, 1918 and 1919? If so, you may be entitled to relief under the remedial provisions of the law and it is unquestionably to your advantage to make all adjustments before the Government discovers errors. It makes your case one hundred (100%) percent stronger.

Have you filed claims for Rebates-Refunds? Are you fully satisfied with the status of said claims? Would not personal supervision and follow up before Department insure prompter settlement?

We maintain a Legal Department in Washington, D. C., and have associated with us Mr. Ellis C. Johnson, twenty-five (25) years, General Counsel, Legal Advisor and Solicitor of the Bureau of Internal Revenue. Mr. Johnson has successfully handled more claims before the Department than any man in the country. Mr. George B. Furman and Mr. Johnson give their attention to the preparing and follow up of all our claims.

As Ex-Government Officials, with years of experience, with ability to see, and capacity to analyze the Tax Laws, Rules and Regulations from the Washington Viewpoint, we offer a most unique service, a service needed by the Taxpayers, to the end that they obtain every deduction permissible under the Law. Allow us to review your Federal Income and Excess Profits Tax Returns.

Hoping that we shall be favored with your valued business, which if entrusted to us shall receive our prompt, careful and most thorough attention, we are,

Yours very truly,  
ROBERTSON, FURMAN & MURPHY, INC.

*P. W. Robertson*  
President

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TOLEDO, O.

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RICHMOND, VIRGINIA

Capital and Surplus, \$3,000,000.

J. M. MILLER, JR., President.

W. M. ADDISON, Vice-President.

CHAS. R. BURNETT, Vice-President.

ALEX. F. RYLAND, Cashier

**The National Exchange Bank  
OF BALTIMORE, MD.**

Capital, \$1,500,000

Surplus, \$1,000,000

**ELSTON & COMPANY**

71 W. Monroe St.

CHICAGO

**COUNTY, CITY, SCHOOL, ROAD  
BONDS—WANTED**

**HAVE YOU BONDS FOR SALE?**

WE BUY ALL CLASSES OF MUNICIPAL BONDS,  
INCLUDING CITY, COUNTY, SCHOOL,  
PAVING, ROAD AND DRAINAGE

*The Hanchett Bond Co. Inc.*

39 SOUTH LA SALLE ST., CHICAGO

**JOHN NUVEEN & CO.**

First National Bank Building

CHICAGO

We purchase SCHOOL, COUNTY and MUNICIPAL  
BONDS. Southern Municipal Bonds a Specialty.

Write us if you have bonds for sale

**Contractors and Manufacturers**

**TIME CHECKS**



We Make Them Promptly. Headquarters for Seals,  
Stock Certificates, Stencils, Steel Dies, Brass Signs,  
Enamel Plates, Memorial Plates, Church Seals and Pew  
Plates. Made on our Premises. Send for Catalogue.

**THE J. F. W. DORMAN COMPANY  
BALTIMORE, MD.**



# PROPOSALS

BOND ISSUES
BUILDINGS
PAVING
GOOD ROADS

Bids close December 16, 1920.

**TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C.,** November 18, 1920. Sealed proposals will be opened in this office at 3 P. M. December 16, 1920, for alterations and repairs to plumbing in the United States Courthouse and Postoffice, Covington, Ky., in accordance with specification and drawings, copies of which may be had at this office or at the office of the Custodian, Covington, Ky., in the discretion of the Supervising Architect, **JAMES A. WETMORE, Acting Supervising Architect.**

Bids close December 7, 1920.

**PROPOSAL FOR STEEL RODS, DIES, Chisels, Pumps, Screen-door Springs, Iron Pipe, Motors, Riveting Forges, Turnbuckles, Platform Scales, Gauges for Unloading Towers, Copper Tacks, Grease Cups, Fusible Plugs, Motorboat Horns, Motorcycle Horns, Rubber Tires, Rubber Tubes, Vulcanizing Cement, Horse-hide Gloves, Duck, Boiler Covers, Asbestos Gaskets, Packing, Steam Hose, Rubber Tubing, Celluloid, Glass, Crayons, Sewer Pipe, Paper, Paper Napkins, Paper Drinking Cups, and Millwork.** Sealed proposals will be received at the office of the General Purchasing Officer, The Panama Canal, Washington, D. C., until 10.30 o'clock A. M. December 7, 1920, at which time they will be opened in public, for furnishing the above-mentioned articles. Blanks and information relating to this Circular (1421) may be obtained from this office or the offices of the Assistant Purchasing Agents, 24 State Street, New York City; 606 Common Street, New Orleans, La., and Fort Mason, San Francisco, Cal.; also from the United States Engineer offices in the principal cities throughout the United States. **A. L. FLINT, General Purchasing Officer.**

Bids close December 22, 1920.

**PROPOSALS FOR ELECTRIC TOWING Locomotives and Parts.** Sealed proposals will be received at the office of the General Purchasing Officer, The Panama Canal, Washington, D. C., until 10.30 A. M. December 22, 1920, at which time they will be opened in public, for furnishing the above-mentioned articles. Blanks and information relating to this Circular (1415) may be obtained from this office or the offices of the Assistant Purchasing Agent, 24 State Street, New York City; 606 Common Street, New Orleans, La., and Ft. Mason, San Francisco, Cal.; also from the United States Engineer Offices in the principal cities throughout the United States. **A. L. FLINT, General Purchasing Officer.**

Bids close December 15, 1920.

**PROPOSALS FOR HYDRAULIC TURBINE.** U. S. Engineer Office, Florence, Ala. Sealed proposals will be received here until December 15, 1920, and then opened, for furnishing and delivering one (1) Hydraulic Turbine of 1000 horse-power capacity, with governor. Further information on application.

Bids close December 15, 1920.

## \$65,000 6% School Bonds

**Morehead City, N. C.**  
The Board of Graded School Trustees of the Morehead City Graded School District of Morehead City, Carteret County, N. C., will receive sealed proposals addressed to the undersigned, until 12 o'clock M. Wednesday, December 15, 1920, at which time the bids will be read at a public meeting of said Board at the City Hall, Morehead City, N. C., and sale made; denomination one thousand (\$1000) dollars, principal and semi-annual interest payable in New York, in lawful money of the United States; coupon bonds bearing interest at the rate of six (6%) per cent. per annum, and maturing December 15, 1950, being thirty years from the date of issue. The bonds are general obligation of said Graded School District, and an unlimited tax for the payment of the principal and interest has been authorized by law and ordinance. This issue is authorized by special act of the General Assembly of the State of North Carolina, ratified August 24, 1920, known as House

Bill 280 and Senate Bill 322, and by the authority of the vote of the qualified voters in said Graded School District at an election held Tuesday, November 2, 1920.

Bids must be enclosed in sealed envelope marked "Proposals for Bonds."

Bidders must deposit with the undersigned before making bids, or present with their bids, certified check, payable to the order of the undersigned, upon an incorporated bank or trust company for two thousand (\$2000) dollars, or the same amount in cash, to secure the said Graded School District against any loss resulting from the failure of the bidder to comply with the terms of his bid. The bonds are expected to be ready for delivery on the date of the sale, but may be delivered in New York on or before January 1, 1921, and must be paid for by that time. The right to reject any and all bids is reserved.

This November 12, 1920.

**C. S. WALLACE, Chairman.**

Bids close December 7, 1920.

## \$65,000 6% County Highway Bonds

**Carthage, N. C.**  
Sealed proposals or bids will be received by the Board of Commissioners of the County of Moore, State of North Carolina, at its office in Carthage, N. C., by mail or otherwise, up to 1 P. M. December 7, 1920, for purchase of \$65,000 6 per cent. Moore County Highway Bonds (interest payable semi-annually on first day of January and July), bonds to be dated January 1, 1921; \$20,000 payable January 1, 1931; \$20,000 payable January 1, 1941, and \$25,000 payable January 1, 1951.

Bidders may file sealed proposals or bids for blocks of said bonds maturing at different dates or for the entire issue.

Bidders must deposit with bid certified check payable to the County of Moore, or cash, equal to 2 per cent. of the face of bonds bid for to secure county against loss resulting from failure to comply with terms of bid.

Bids will be opened, in public, in office of Board in Carthage, N. C., at 1 P. M. December 7, 1920.

Bids less than par will not be accepted. The board reserves the right to reject all bids.

**H. P. McPHERSON,**  
Chairman of Board.

Bids close December 6, 1920.

## \$100,000 6% Road and Bridge Bonds

**Dobson, N. C.**  
On the 6th day of December, 1920, same being the first Monday, at 12 o'clock M., the following county bonds will be offered for sale publicly, to wit: Seventy-five Thousand Dollars (\$75,000) of good roads bonds, bearing 6 per cent. interest, payable semi-annually from the date of issue, in denominations of One Thousand Dollars (\$1000), the time of maturity being determined by the Board of County Commissioners on the day of sale. At the same time Twenty-five Thousand Dollars (\$25,000) of bridge bonds will be sold publicly, bearing 6 per cent. interest, payable semi-annually from date of issue, the maturity of these bonds to be determined by the Board of County Commissioners on the day of the sale.

Sealed bids will be received by Henry Wolfe, Clerk of the Board, at Dobson, N. C., up to the hour of the sale. A certified check, One Thousand Dollars (\$1000), required by each bidder. The right is reserved to reject any or all bids.

By order of the Board of Commissioners. November 1, 1920.

**S. F. SHELTON,**  
Chairman.

Bids close December 21, 1920.

## 190,000 Municipal Improvement Bonds

**South Jacksonville, Fla.**  
City Council will open bids at City Hall evening of December 21, 1920.

Bonds to be sold will be denomination of \$1000 each, dated November 1, 1920, and payable February 1, A. D. 1950.

Present bonded indebtedness, \$125,000. Value of property assessments, real and personal, for year 1920, \$4,607,780.

**R. M. ROGERO, City Clerk.**

Bids close January 12, 1921.

## \$1,112,000 5% Road Bonds

**OUACHITA PARISH, LOUISIANA.**

**Monroe, La.**  
Sealed bids will be received up to 12 M. January 12, 1921, by the Police Jury of the Parish of Ouachita, State of Louisiana, Monroe, La., for the purchase of \$1,112,000 of Road District Number One bonds.

The bonds will be dated February 1, 1920, bear 5 per cent. per annum interest, payable semi-annually on the first day of February and the first day of August. The bonds will be in denominations of \$1000 each.

Interest and principal will be paid at the National Bank of Commerce, New York City. A certified or cashier's check for at least \$27,800, payable to J. M. Breard, Jr., president of the Police Jury, must accompany each bid.

The Police Jury reserves the right to reject any or all bids.

(Signed) **J. M. BREARD, JR.,**  
President of Police Jury.

**W. A. O'KELLY,**

Clerk of Police Jury.

Bids close December 14, 1920.

## Copper Wires

**New Orleans, La.**  
Sealed proposals will be received by the Board of Commissioners of the Port of New Orleans at their office, Suite 200, New Orleans Court Building, until 8 P. M. o'clock December 14, and then publicly opened, for the furnishing of rubber-covered, weather-proof and bare copper wires for the Board's coal-handling plant.

A deposit of \$300 cash or certified check is required with proposal.

Successful bidder will be required to sign a notarial contract and furnish bond in amount of \$1200 to guarantee fulfillment of contract.

Payments will be due 30 days after delivery of materials.

The right is reserved to accept any bid in part or to reject any or all bids and to waive informalities.

List of materials can be obtained from the Supervisor of Purchases, Board of Commissioners, Port of New Orleans, No. 1 Canal Street, New Orleans, La.

**W. O. HUDSON,**  
President.

Bids close December 6, 1920.

Previously advertised for December 9.

## Road and Bridge Improvements

**Titusville, Fla.**  
Sealed proposals will be received by the Board of County Commissioners of Brevard County, Florida, at Titusville, Fla., at the office of the county clerk, until December 4 at 2 P. M., 1920, for the construction of roads and bridges in Cocoa Beach Special Road and Bridge District, said improvements to consist of clearing, grubbing, grading and paving of about 28 miles of roads and the construction of about 6000 feet of trestle bridge, including one draw span, also the construction of about 90,000 cubic yards of dredge fill.

Plans and specifications may be obtained from the engineer at actual cost of \$3 and are on file at the office of the board and engineer. All bids are upon the unit basis and will be divided into sections in order that contractors may bid upon certain portions of the work; they are to be directed to the Chairman of the Board of County Commissioners, and must be accompanied by a certified check, bidder's bond or cash, payable to the Board of County Commissioners of Brevard County, Florida, in an amount of 5 per cent. of the total amount of the bid, which check or equivalent will be forfeited to the county upon failure of the successful bidder to enter into contract and furnish acceptable bond. Successful bidders will be required to furnish a construction bond of 25 per cent. of the amount of their contract price. The right is reserved by the board to reject any or all bids.

By order of Board of County Commissioners of Brevard County, Florida, this 9th day of November, 1920.

**S. A. OSTFEN,**  
Chairman Board of County Commissioners  
**J. F. MITCHELL,**  
Clerk Board of County Commissioners  
**C. M. ROGERS, Engineer,**  
Daytona, Fla.

Bids close November 30, 1920.

### Gravel Surfacing

STATE OF MARYLAND.  
STATE ROADS COMMISSION.

Baltimore, Md.  
Sealed proposals for building the following section of State Highway as follows:  
**CHARLES COUNTY—CONTRACT CH-18:**  
One section of State Highway from end of Contract CH-15 to Benedict for a distance of 3.90 miles. (Gravel Surfacing.) Will be received by the State Roads Commission at its office, 601 Garrett Building, Baltimore, Md., until 12 M. on the 30th day of November, 1920, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans, will be furnished by the Commission upon application and cash payment of \$1, as hereafter no charges will be permitted. No bids will be received unless accompanied by a certified check for the sum of Five Hundred (\$500) Dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond and comply with the Acts of the General Assembly of Maryland respecting contractors.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 16th day of November, 1920.

J. N. MACKALL,  
Chairman.

L. H. STEUART,  
Secretary.

Bids close December 10, 1920.

### Road Construction

Tallahassee, Fla.  
Sealed proposals will be received by the State Road Department at Tallahassee, Fla., up to 4 o'clock P. M. on the 10th day of December, 1920, for the improvement and completion of a section of State Road No. 1, beginning at Lake City and extending east to the Baker County line, being approximately 9.9 miles in length.

The proposed improvement involves approximately:

104,415 square yards rock base course, 18 feet wide.  
92,814 square yards bituminous macadam or asphalt wearing surface, 16 feet wide.  
Drainage structures, 16 culverts, from 15x15-inch to 8-foot span, requiring 104.7 cu. yds. Class "A" concrete; 20.0 cu. yds. Class "B" concrete, 5380 pounds steel reinforcement.

All rock used in the base course to be furnished by the State Road Department, f. o. b. Lake City and such other stations as may be established along the S. A. L. Ry. for this construction.

Proposals will be considered as follows:

(a) For rock base, complete in place.  
(b) For bituminous or asphaltic wearing surface, complete in place.  
(c) For drainage structures, complete in place.

(d) For completed pavement, including drainage structures, rock base course and bituminous or asphaltic wearing surface, as all provided for in the plans and specifications for the proposed improvement.

Maps, plans, specifications and estimates are on file at the office of the State Road Department, Tallahassee, Fla., for examination, and proposal forms may be obtained upon application to the State Highway Engineer.

The right is reserved to reject any or all bids.

All proposals must be accompanied with

a certified check, made payable to Forrest Lake, Chairman State Road Department, in the sum of five (5) per cent. of the proposal, as evidence of good faith and entering into contract by the party to whom the work may be awarded.

Any bidder who shall, after fifteen (15) days' notice being given of the acceptance of his or their proposal or proposals, fail to execute the contract and furnish the required bond shall forfeit his or their claim to the work, and his or their certified check shall be retained and used by the State of Florida as liquidated damages.

STATE ROAD DEPARTMENT,  
FORREST LAKE,  
Chairman.

CHAS. A. BROWNE,  
State Highway Engineer.  
November 9, 1920.

Bids close November 30, 1920.

### Sand-Clay Road

Americus, Ga.  
Sealed proposals will be received by the State Highway Department of Georgia, at the office of the Division Engineer, Third District, Court House, Americus, Ga., at 11 A. M. on the 30th day of November, 1920, for the furnishing of all labor, equipment, material and other things necessary for the construction of 5 miles of sand-clay road, 26-foot width surfacing, located between Georgia side of the Chattahoochee River and Central of Georgia underpass in Quitman County, on what is locally known as the Georgetown-Fort Gaines Road.

The work will consist of 30,500 cubic yards of common excavation, 1726 cubic yards borrow excavation, 2.0 acres clearing and grubbing, 39,232 sta. yards overhaul, 13,094 cubic yards sand-clay surfacing, 60 linear feet 18-inch pipe, 131 linear feet 24-inch pipe, 19.44 cubic yards headwall concrete, 32.96 cubic yards Class A concrete (box culvert) and 219 pounds reinforced steel.

Said work will begin on or about the 15th day of December, 1920, and shall be completed within 180 working days.

Plans and specifications will be on file at the office of the Division Engineer, Third District, Americus, Ga., and at the office of the State Highway Engineer, Atlanta, Ga., by November 6, 1920, and copies of same may be had for \$4 to cover cost of blueprinting.

Said work will be paid for as same progresses, to wit: 5 per cent. of the amount done each calendar month will be paid between the 10th and 15th of the succeeding month, and final payment within 30 days of final completion and acceptance.

Proposals must be submitted on regular forms which will be furnished by the undersigned. Bids will be received on both Form A and Form B types of contract.

Each proposal must be accompanied by a certified check or bidder's bond for 5 per cent. of the amount bid.

Bond will be required of the successful bidder as stipulated by law.

Right is reserved to reject any or all bids and to waive all formalities.

This the 14th day of October, 1920.  
By W. C. CAYE, JR.,  
Division Engineer, Third District.

Bids close December 10, 1920.

### Bridge Construction

Tallahassee, Fla.  
Sealed proposals will be received by the State Road Department at Tallahassee, Fla., up to 5 o'clock P. M. on the 10th day of December, 1920, for the construction of a bridge on State Road No. 2, over the Suwannee River, near White Springs, Fla.

The proposed structure consists of a

through steel truss, 228 feet C. to C. piers, on reinforced concrete abutments, with a clear roadway of 20 feet.

The proposed improvement involves approximately:

3,480 lineal feet wood foundation piling.  
503 cubic yards Class "A" concrete.  
34,300 pounds steel reinforcement.  
410,000 pounds structural steel.  
15,200 pounds cast-steel plates, rollers, etc.  
456 lineal feet hand rail.

Plans and specifications are on file at the office of the State Road Department, Tallahassee, Fla., for examination, and may be obtained upon application to the State Highway Engineer for the sum of \$10. When returned with a bona fide bid, \$5 will be returned to the bidder.

Proposals may be submitted as follows:

(a) On substructure, complete in place.  
(b) On steel superstructure, complete in place.

(c) On completed bridge as provided for in the plans and specifications.

The right is reserved to reject any or all bids.

All proposals must be accompanied with a certified check, made payable to Forrest Lake, Chairman State Road Department, in the sum of five (5) per cent. of the proposal, as evidence of good faith and entering into contract by the party to whom the work may be awarded.

Any bidder who shall, after fifteen (15) days' notice being given of the acceptance of his or their proposal or proposals, fail to execute the contract and furnish the required bond shall forfeit his or their claim to the work, and his or their certified check shall be retained and used by the State of Florida as liquidated damages.

STATE ROAD DEPARTMENT,  
FORREST LAKE,  
Chairman.

CHAS. A. BROWNE,  
State Highway Engineer.  
November 9, 1920.

Bids close January 8, 1921.

### Miami River Bridge

AT AVENUE G, MIAMI, FLORIDA.  
Sealed proposals, to be filed with the city clerk, will be received by the City of Miami, Florida, up to 7.30 P. M. January 8, 1921, for the construction of a bridge over the Miami River at Avenue G. The bridge is a double-leaf steel bascule span with piers and embankment approaches. The clear span is 115 feet; the total length of improvement 495 feet. One 30-foot roadway; two 6-foot walks. Reinforced concrete bascule piers and retaining walls.

Bids upon a lump-sum basis and also upon a cost-plus-a-fee basis will be considered. With each bid there shall be a certified check for at least 10 per cent. of the bid, made payable to the city treasurer; this check will be forfeited as liquidated damages by the bidder if he is awarded the contract but fails promptly to execute contract and bond, or will be returned to him upon such execution. Checks of other bidders will be returned promptly. The contract will be awarded to the lowest competent, responsible bidder, but the city may reject any or all bids, adopt either form of bid and waive informalities.

Plans and specifications may be examined in the offices of Chas. W. Murray, city engineer, Miami, Fla., and of Harrington, Howard & Ash, consulting engineers, at Jacksonville, Fla., and 1012 Baltimore Avenue, Kansas City, Mo. Copies may be secured from the consulting engineers at Kansas City by depositing \$25. Such copies shall be returned and refund of \$20 made.



### MINERAL AND TIMBER LANDS, WATER POWERS, MISCELLANEOUS PROPERTIES

BONA-FIDE PURCHASERS in the market for coal lands, leases or going mines in Eastern Kentucky and West Virginia, or for oil and gas leases in either the Eastern or Western Kentucky oil fields within producing area, or production itself, will be given an opportunity to procure same upon dividend-paying basis. Only properties offered that will bear every inspection and at actual market prices—not inflated prices. N. P. Howard, Lexington, Ky.

### MINERAL AND TIMBER LANDS, WATER POWERS, MISCELLANEOUS PROPERTIES

I MAKE A SPECIALTY of leases, royalties, production, coal and timber lands and timber properties in Kentucky. Have a fine tract of timber, with mills, etc. Also handle leases in Texas and Louisiana. E. D. Watkins, Oil Producer, Irvine, Ky.

### WATERPOWER

FOR SALE—The easiest developed and best water in Virginia, on the James River, 54 miles west of Lynchburg, on the C. & O. R. R.; 50 to 100 acres of land at this place go with the water-power, for a manufacturing site. This is a most ideal place for a number of cotton mills; fine climate, good water and cheap living; plenty of native help in this territory. Scotch-Irish and Pennsylvania Dutch ancestry. Can raise \$100,000 stock for a cotton mill, if good mill people will start the mill. Jasper Miller, Springwood, Va.



## ZINC PROPERTY

FLUORSPAR AND ZINC properties for sale or lease, including some developed, equipped and producing mines. Also have a few Kentucky oil leases. C. W. Haynes, Marion, Ky.

## TALC DEPOSIT

A LARGE DEPOSIT of fine commercial talc on railroad can be obtained on most reasonable terms. S. P. McConnell, Carthage, North Carolina.

## CLAY PROPERTIES

## LARGE BRICK CLAY PROPERTY.

Favorably located directly on railroad and on bricked highway, eight miles west of Newbern, N. C.; adapted for high-grade brick, tile and other clay products. Has been examined and recommended by an eminent engineer as being unusually meritorious. Report will be furnished to interested parties. Owner will accept part payment in securities of properly financed and managed company. Thomas B. Hammer, Owner, Philadelphia, Pa.

## FELDSPAR MINE

FOR SALE—A high-grade feldspar mine, good shipping facilities; enough mica and quartz to pay mining expense; also a band of good kaolin in same dike. Entire output contracted for at 100 per cent. net profit aboard cars. Exceptional opportunity. Ill health, want to go to California, reason for selling. Will sacrifice to quick purchaser. P. O. Box 54, Asheville, N. C.

## OIL LANDS AND LEASES

## FOR A SAFE INVESTMENT BUY AN OIL LEASE IN GOOD TERRITORY.

We have leases in the Big Bend and Trans-Pecos sections of Southwest Texas, where geologists say the prospects for oil and gas are the best. These leases were selected in the most favorable territory one year ago. Small tracts, \$5 per acre; half sections, 320 acres, \$2.50 per acre. Write Drawer 10, Irvine, Ky.

## COAL AND TIMBER LAND

COAL AND TIMBER LAND in Tennessee, 35,000 acres with three seams, ranging 4 to 12 feet thick. Best coking coal in country; conditions such can be mined by drifting and at less expense than any other section, and located where distribution is unsurpassed. Also 2000 to 3500 feet merchantable saw timber per acre. Land fine for agriculture when cleared. Price in fee, \$20,000; titles first-class. Terms can be arranged with responsible parties. This is an exceptional property. W. R. Power, 829 City Bank Building, Mobile, Ala.

## TIMBER OPERATION

FOR SALE—Lumber milling proposition, complete equipment, now in operation. Eastern Carolina; 25,000,000 feet timber; plenty more available; big bargain; \$175,000, full cash, balance terms. Address No. 5700, care Manufacturers Record, Balto., Md.

## TIMBER

## CEDAR POLES.

FOR SALE—Fifty-six Cedar Poles, 30 feet long, 6 inches top. Can be cut and split into fence posts. Absolutely sound and never used. At only \$2 each for the lot I. O. B. care our plant, East Buffalo, N. Y.

THE LIVE POULTRY TRANSIT CO.  
343 South Dearborn St.,  
Chicago, Ill.

## HAVE FOUR (4) CARLOADS OF

Choice Holly Logs for Sale.  
Address The Quaker Oats Co.,  
Foxworth, Miss.

TIMBER FOR SALE—19,000 acres, Barnwell County, South Carolina; estimated 55,000,000 feet pine, 20,000,000 feet cypress and ash, 60,000,000 feet hardwoods; on railroad and river. Believed to be finest body of timber this section. J. W. Barnes, Savannah, Ga.

## LATH AND TOBACCO STAVE TIMBER.

FOR SALE—10,000 to 15,000 cords standing timber on N. S. R. R. near Newbern, N. C. Will sell by the cord with cash advance. Fine opportunity for lath or tobacco stave factories. Thos. B. Hammer, Philadelphia, Pa.

## LUMBER AND BUILDING MATERIALS

WHEN NEEDING lumber and shingles, straight or mixed cars; pine, cypress, hardwood, cedar or redwood, wire us. Extra star cedars, transits \$5.20 delivered. Louisiana Lumber & Shingle Co., Dallas, Texas.

## TIMBER LAND

FOR SALE—255 acres river bottom timber land; estimated 12,000 ties; one-fourth mile from town; railroad passes through one corner; fine farming land; no improvements. Terms one-fourth cash, balance one, two and three years, 6 per cent. lien retained. Apply to W. S. Duvall, Paris, Tenn.

## ONE HUNDRED MILLION FEET VIRGIN YELLOW PINE

And twenty thousand acres of land for sale; best in Florida; never been offered for sale before; will give one hundred crops turpentine boxes also. There is possibly phosphate on land, although never prospected; however, land is in the phosphate belt. Prices and terms reasonable.

## ALSO ANOTHER TRACT OF FIFTY MILLION FEET

Of fine hardwood timber, largely red gum and oak. Good transportation facilities. Write Timber Owner, Box 201, Jacksonville, Florida.

## FARM AND TIMBER LAND

329 ACRES FOR SALE CHEAP, direct by owner; 50 acres cultivated, balance timber; 6-room dwelling, large barn; 2½ miles from river landing, P. O. churches, schools, etc. H. R. Dudley, 1809 Willoughby Ave., Norfolk, Va.

FOR SALE—Florida lands and timber; 30,000 and odd acres good virgin pine timber; location, So. Florida, on and near R. R. Rare bargain; only \$9 per acre; fee-simple; also 40,000 and odd acres choice virgin pine timber only \$12.50 per acre fee simple; 2120 acres 2120 acres mostly used good pasture; hence, extra choice for stock purposes; large percentage good quality truck and farm land; some fine citrus fruit and settlement land. Price \$15,500.

1920 acres nearby the above; general purpose land; large barn and wagon shed; several small houses. Price \$12,500.

2120 acres, 3 to 4 miles from R. R.; very best quality of pine land (extra fine timber now being removed); joining and near by are many good groves and farms to prove quality of soil. This is dirt cheap at \$20 per acre wholesale. My price, only \$12.50 per acre. These last three offerings are well located in good portion De Soto County, Fla., with first-class people owning large and small tracts joining and in every direction. 60,000 and some odd acres finest stock farm proposition in South Florida; solid body; too cheap to quote price only to men meaning business and interested. Some extra choice money-making heavy-bearing groves, well located, with plenty of extra land for farm and stock; also some the best quality of well-drained muck land in the State; only 1½ miles of R. R.; \$130 per acre. Address L. M. Hughes, Owner's Representative, Box 111, Limestone, Florida.

## SOUTHERN HOMES

COTTAGE on Clearwater Beach, facing Gulf; furnished; all modern conveniences; four rooms and sleeping porch upstairs; living-room, dining-room, kitchen, servants' room and large porch downstairs. Also, large garage. Price \$10,000. J. A. Crenshaw, 311 Seventh Ave., Tampa, Fla.

## CATTLE RANCH

FOR SALE—Cattle ranch in Southwestern Texas, containing approximately one hundred and fifty thousand acres of deeded land, well fenced and with good improvements; about one hundred and fifteen thousand acres adjoining under good lease at a very cheap rental; also under good fence; transportation facilities good for moving stock; several thousand head of cattle can be had with the ranch, or ranch will be sold without stock. For price and further particulars write G. E. Moon, Beaumont, Texas, Box 562.

## FRUIT, FARM AND TRUCK LANDS

## KENTUCKY

FINE RICH LEVEL FARM of 276 acres, good improvements, on two public roads; splendid fences; all necessary outbuildings; plenty stock tools; tractor, hay, oats and corn; flock of sheep, lot of cattle, hogs, automobile; fine spring, fish pond; never-failing well; pump and engine.

The personal property is worth at least \$5000, and owner has refused \$105 per acre for land alone. Walkout deal \$30,000. One-third cash, balance one, two, three, four and five years. R. M. Amos, Agt., Olmstead, Ky.

## DISTRICT OF COLUMBIA

## GENTLEMAN'S COUNTRY ESTATE BARGAIN.

Beautiful colonial center-hall type house. First floor—Living-room, music-room, library, dining-room, butler's pantry, kitchen and extra lavatory. Second floor—Five master bedrooms, two tiled baths. Third floor—Three bedrooms and bath. Six open fireplaces; large double porches on two sides; hot-water heat; hardwood floors; gas; electricity; 10 acres; lawn; tennis courts; rose garden; kitchen garden; garage for three cars; chauffeur's quarters; stable; chicken-house; carriage-house; 100 fruit trees; grape arbor; wonderful trees and shrubbery, hedges. Thirty minutes to Treasury by trolley; 30 minutes by automobile over macadam roads.

Liberal terms if desired.  
Will consider an exchange.

O. B. ZANTZINGER,  
Washington, D. C.

## FLORIDA

THE BEST INVESTMENT in the State of Florida or the South; 45,000 acres, at \$3.50 an acre, close to good city and sugar corporation and mills, and soon to have refinery, and, too, it is close to the famous Hastings potato section; has three railroads through this property and close to water transportation, which gives a freight rate second to none; no better labor conditions than in this section; all in all, this is one of the best farm and subdivision propositions to be had for the money. For sale by W. J. Norris, Atlanta Trust Company Bldg., Atlanta, Ga.

7160 A. AGRICULTURAL LAND, 3½ miles R. R. town near Florida west coast, 15 miles to good Gulf shipping point; under timber and turpentine contract to Dec. 31, 1924; lessee pays all taxes to that date. An exceptional bargain at \$5 per acre. A. M. Edwards, 270 Ponce de Leon Ave., Atlanta, Ga.

FOR SALE—60,000 acres land, well located; rail and water transportation; close to market; good title; productive soil. Price and terms on application. G. E. Gage 439 Williams St., Jacksonville, Florida.

FOR SALE—75-acre farm, 20 acres of orange grove, 20 acres pecan grove, just beginning to bear; orange crop estimated this year at 1800 boxes; eight-room dwelling, four-room tenant-house, necessary outbuildings; situated four miles from small town on main line of Seaboard Railway, with mail deliveries at gate each day. Price \$13,000, including mule, cows, hogs and chickens. If bought at once, buyer will get this year's orange crop. Easy terms. J. D. White, Micanopy, Fla.

FOR SALE—40-acre tract of land, 5 miles from the Courthouse, 1½ miles from West Tampa; five-acre orange grove on tract; one-half old trees and bearing; one-half trees from one to four years old; on brick-paved road; no improvements on tract except orange grove. Price \$8500. J. A. Crenshaw, 311 Seventh Ave., Tampa, Fla.

SUGAR AND RICE LANDS in Cape Sable region, Florida. Two crops of rice a year. W. W. Dewhurst, St. Augustine, Fla.

FOR SALE—An up-to-date truck and stock farm in Florida's best county; 440 acres in tract, 175 to 200 acres in excellent pasture; will keep 200 head cattle ten months in the year; 150 to 175 acres under cultivation; fine soil for trucking; eight tenant-houses, five-room cottage, good large barn and silo; railroad through edge of place with side-track right at the lot; \$65 per acre, including all farm implements; easy terms. J. D. White, Micanopy, Fla.

FOR SALE—A dandy farm of 220 acres, good rich soil, fine for trucking or general farming; 180 acres under cultivation, bordering on lake; 30 acres in orange grove; good six-room dwelling, three tenant-houses, in three miles of small town with high school; two side tracks on place. Price \$19,000, very easy terms. J. D. White, Micanopy, Fla.

COME TO FLORIDA, where it's "summer time in the winter" and pleasant all the year "round." Send for booklet, "Largest Orange Tree in the World," and list of groves and farms. Tampa-West Coast Realty Co., Tampa, Fla.

## LOUISIANA

SUGAR LAND, Louisiana, 4500 acres, 44 miles west of New Orleans. Write to Wm. Rampe, Ottawa, Ohio.